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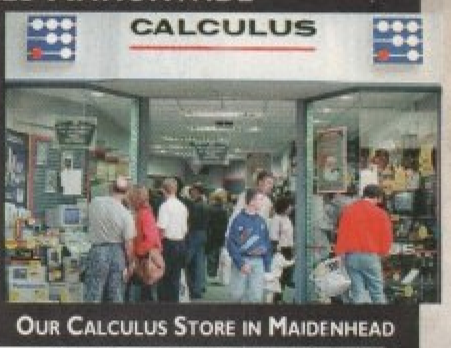
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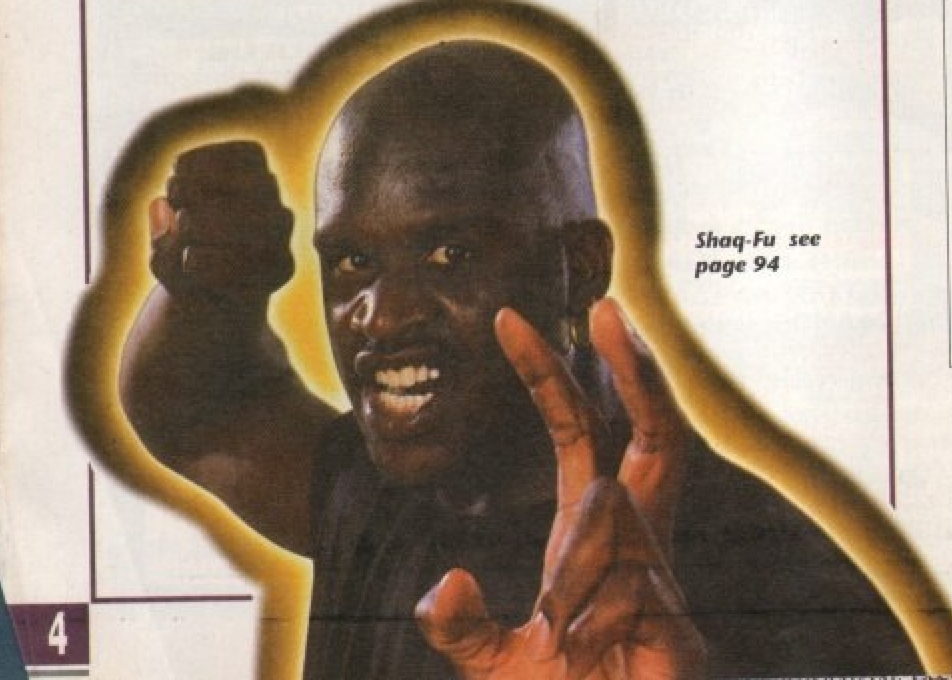
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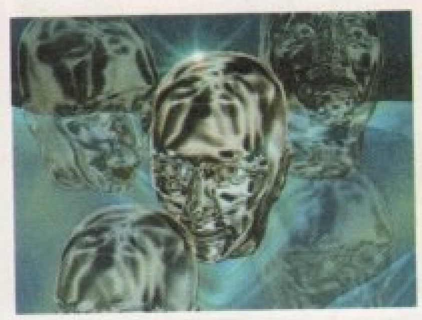
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Game Reviews



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Reviews



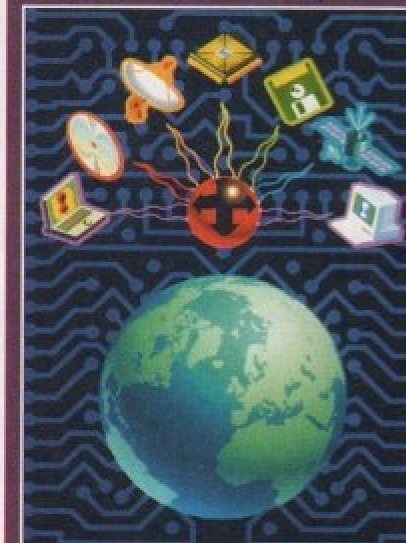


Features



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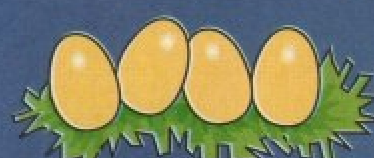
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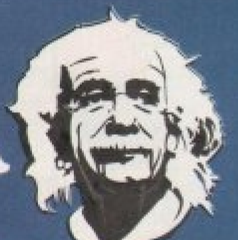
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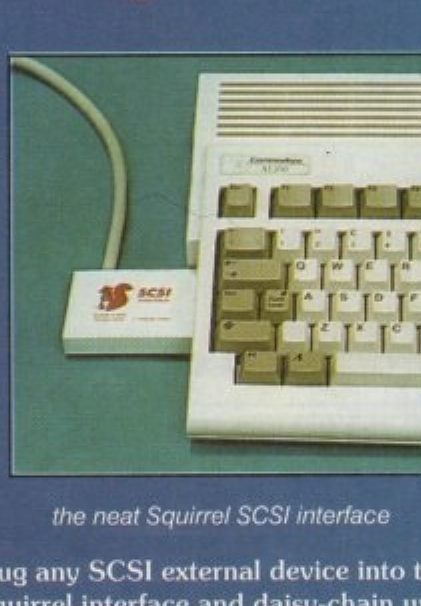
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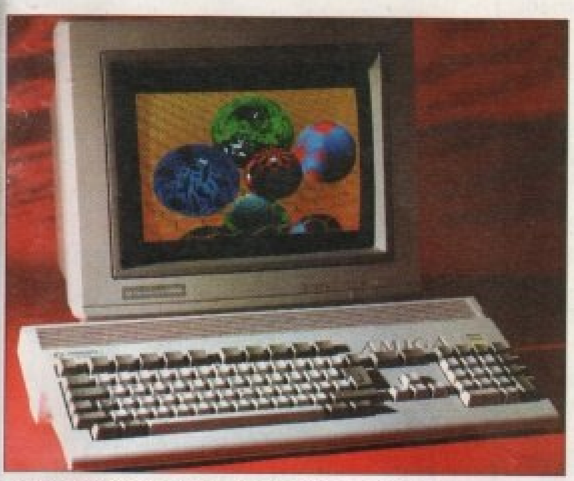
NEWS

By ADAM PHILLIPS

On a positive note

While liquidators liquidate, bidders bid and the PC continues to become the standard for home computers, there is a resoundingly positive mood among suppliers and distributors throughout the country. Despite the setbacks and uncertainty, the Amiga is still a popular machine. Computer TradeWeekly, the industry newspaper, carried out a survey among 50 computer and video game retailers asking if they would welcome back the Amiga with open arms. 82 per cent of those polled gave the Amiga a resounding thumbs up. This feeling is apparent throughout the hardcore Amiga specialists still peddling the Amiga as part of their main stock.

There would also appear to be a genuine feeling that the whole dastardly affair is to be drawn to a conclusion very soon. Giles Harwood at Gordon Harwood Computers is happy to admit that sales "are going far better than we ever expected." When asked about the prevailing mood of gloom in certain quarters, he was quick to point out: "What good is gloom in circumstances like this? It spreads quickly and we all end up suffering – we're all in the same boat after all."



A1200: The industry believes it has a future

Tony Ianiri, head of Power Computing, is equally enthusiastic: "I'm still very positive. At the moment our business is booming and when Commodore does finally get bought out, we'll continue to support the format happily."

Up in the north of England, the mood is similarly lifted. Brian Cobberley of the First Computer Centre in Leeds is still very happy with customer awareness of the Amiga: "There was a great demand for the machines before Christmas and even afterwards as well. At the end of the day, the Amiga is still a fine computer."

He continued: "There's a tremendous amount of software and a massive user base out there still – the machine isn't going to roll over and simply die."

As to the future, he simply wants the successful buyer to push the Amiga to the front as the machine to have. Attitudes that Commodore of old used to have need to be thrown out and reliability problems that have become the bane of some 1200 owners rectified permanently.

With all these positive attitudes bouncing about the UK isles, one only hopes that by this time next month something will have finally happened. Keep your fingers crossed.

A glimmer of light

The Commodore saga continues. David Pleasance, co-head of the MBO lead by C=UK, told *Amiga Computing* that they were signing a contract for certain come this Friday (20/1/95). The confusion last month over whether the money for the initial bid had actually been given to the liquidator was clarified by Pleasance. "The money got held up in the bank process but it went through."

During this delay, Alex Amor of CEI in the States, another contender for Commodore's crumbled empire, placed a bid of his own. Fortunately for Pleasance and co., C=UK's money finally arrived and was higher than the CEI bid. The liquidator apparently decided that the highest amount would be accepted, leaving CEI out in the cold.

As usual, in true liquidating style, the actual signing of a contract still hasn't been achieved. In the meantime, a 93-page document detailing various legal requirements, conditions and more has been drawn up for Amiga International to hopefully clear the legal tanglings that have dogged the entire process from day one.

Quite why there's been a delay of the actual bidding process is not entirely clear. However, Pleasance estimates that the computer industry will know the outcome in three weeks time (mid-February). Déjà-vu?

Barclays set up camp on Super Highway

Jumping on the cyber bandwagon is Barclays who have opened up services to anyone interested in a Barclaycard. Their first offering is the 'Barclay Netlink', an interactive electronic magazine connected to the Internet.

Users can order a Barclaycard application form via their keyboards and obtain information on the various offers and services attached with the Barclaycard. The bank's future plans highlight one of the problems of the Internet – that of security.

The likes of on-line payments are not possible at present because there is no real way of securing customer confidentiality and peace of mind about who can access such information.

"As technology develops we may be able to ensure the confidentiality and security needed to execute financial transactions on-line. At present, this is not the case with the Internet." commented Roger Alexander, managing director of Barclaycard's Emerging Markets Unit. "By our early participation, we expect to be a major contributor to the development of Internet's security and electronic payment protocols."

For more details, the E-mail address is info@barclaycard.co.uk.



Barclaycard: On the Internet for interested customers

NEWS BRIEFS

Toaster tempters

For those in the lucky and financially stable enough position to have a Passport 4000 and NewTek's Video Toaster, they can now buy Alpha Paint from Innovision Technology, a 36-bit paint and image enhancement application for the Toaster.

The makers claim that the package brings a high level of quality and performance to the Toaster with its wide variety of 24-bit painting, masking and enhancement tools, and a full 12-bit Alpha Channel for anti-aliasing, blending and compositing.

Sixteen million colours can be painted directly on to the Toaster's display. It also features one-of-a-kind key translucency and soft-edge feathering effects over live video, utilising the Toaster's hardware video mixing channel.

The package costs $699.95 and is available from Innovision Technology on 0101 510 638 0800.

★ ★ ★ ★

'Bigfoot' prints

For those of you serious about your printing needs, you can now reach into your company money pits and pull out £4250 for the latest in dye sublimation and wax transfer printers. The Pictura 310 dual function printer produces continuous tone, photo realistic, 24-bit colour or 256 level monochrome prints, according to the UK distributors Bannerbridge PLC.

One of the printer's most hyped features is its ability to produce A3 prints. Said David Holyfield, marketing manager for the company: "The Pictura 310 is about one third of the price of its competitors but delivers the same output quality as more expensive A3 machines."

For more details, phone Tom Burgess on 01753 790150.

★ ★ ★ ★

Calling all businesses

Since January 1st, Optonica have been running their Multimedia Services Bureau for any business who wants to explore the growing world of the multimedia industry. Creative, development and marketing organisations can go along and find out about a large range of services from 3D graphic design and kiosk and system design, to gold disc building and pressing and client liaison, among others.

The company are also assuring 100 per cent discretion and for more information, contact Lee Gibson on 01455 558282.



Panasonic KX P2135: The latest dot matrix with the emphasis on quiet operating

Strictly hush hush

Budget printers for home use are still flooding out from all manufacturers, even after the Christmas period. Panasonic have introduced a new model to their range – the KX P2135 quiet printer. Apparently, the quiet technology means that the machine can operate in super-quiet mode at only 43.5 dBA – this could hopefully mean the end of clenched teeth and fists as it prints out 20 sheets of accountancy figures.

With 360 dpi and an operating speed of up to 250 cps, the street price is £150. Call Panasonic on 0500 404041.

Computers aid learning

After the worrying news of government intervention over certification of games last month, some good news has surfaced recently courtesy of Ultralab. The learning technology research centre based at Anglia Polytechnic University have stated that computer and video games can have a strong and positive impact upon the development of children.

Professor Stephen Heppell, head of the centre, stated: "At Ultralab we are concerned with children and their relationship with new technology. Many of our findings run against the established cliché of computer and video games having a derogatory effect on children."

He believes that the way in which a child overcomes a problem or quest in a game is frequently close to the way they should solve problems in the classroom.

He commented: "In both cases it is a process of observe, question, hypothesise and test. The challenge to parents is for them to help children see that the approach they use when playing computer and video games may be used elsewhere."

Another myth that Professor Heppell is keen to readdress is the image of lonely children, sitting in their bedrooms and not socialising with anything other than a screen: "Children naturally want to talk about the things they do and this includes computer and video games. In our work at Ultralab we have been highly impressed by the richness and quality of the language of children describing their gamesplaying.

"Children also play well in very mixed age groups and the gain for youngsters in being able to explain something to older children is very real."

Heppell states that it's healthy for parents to play games with their offspring. If the children do better than their adult peers in certain areas such as games, it can improve self esteem and trigger off talk about strategies and approaches which the professor feels is an invaluable part of the learning process.

The European Leisure Software Publishers Association (ELSPA) have greeted the for-once-positive comments with open arms. Roger Bennett, general secretary for the group, stated: "Computer and video games bring pleasure to many millions of people around the world, so it is reassuring when a renowned educationalist speaks of their merit from a learning viewpoint."

Let's hope the Home Secretary sees it that way.

Raptor eaten by Render Bender posse

A few months back, *Amiga Computing* reviewed one of the latest in the series of Raptor accelerators. The top-end Raptor Plus costs in the region of £15,000. Premier Vision are offering, as a direct rival to the US-based machine, the Render Bender range that consists of three accelerators.

Their top-range model, the 275MHz Warbird, matches the Raptor Plus but costs half the price – crashing in at £7499. The other two machines, the 166MHz Warthog and the 233MHz Firebird, cost £4500 and £6800 respectively. Each come with an Ethernet card, a 17 inch monitor, Windows NT, a 4MB PCI video adapter, a CD-ROM drive and a host of other features.

Premier Vision are also distributing the latest upgrade of Wavemaker. Version two can be used as a standalone or linked up to Lightwave to create instant flying logos using predefined motion paths and animated wipes.

The package costs £129.95 and for more information on all the mentioned products, contact either Andy Bishop or Andy Gould at Premier Vision on 071-721 7050.

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The A4000 Tower comes complete with 6 x 5.25" drive bays, 5 x 3.5" drive bays, real time clock, 7 x Zorro slots and 5 x PC slots.

Both Towers are easy to install.

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PSU 230watt **£99.95**
PSU 250watt (available 3/95) .. **£129.95**

VIDEO DAC 18-BIT

NEW £39.95

Video Dac 18-bit is a graphics card which allows the Amiga to display 262,144 colours simultaneously. The software can display images or animations created and saved with any other 24-bit program.

Video Dac 18-bit plugs externally into the RGB connector with thru' port capabilities, allowing the use of digitizers such as Videon, or a genlock recording with your VCR any image you created in 262,144 colours.

Video Dac 18-bit is able to split the screen and display images/animations at different resolutions or colours at the same time.

Medium Res:	320 x 256 PAL
	320 x 200 NTSC
High Res:	320 x 512 PAL
	320 x 400 NTSC
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	334 x 482 NTSC
Max Res:	768 x 576 PAL
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All resolutions display 262,144 colours

The free bundled software saves your images in the following formats: IFF, IFF24, RGB and Anim, plus a series of dithering modes to enhance the overall quality of the images.

VIDEODAC **£39.95**

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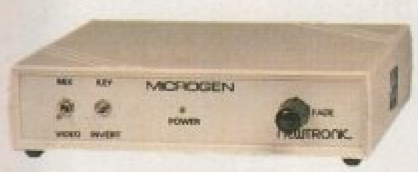


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MICROGEN SVHS Genlock **.£179.95**
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Videon 3.0 unlocks the Amiga's graphic potential. Digitize and display all 4096 colours in high resolution mode and the stunning 29,791 colours mode. Digitize in 24-bit, directly from a VCR, Video Camera, LaserDisc, etc.

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Maxigen 2 is a very high quality genlock for over-laying graphics onto VHS or SVHS. Full hardware fades, colour composition controls and excellent keying quality.

MAXIGEN 2 Genlock **£299.95**

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Picasso II is a 24-bit graphics card offering true retargetable graphics on any Zorro based Amiga. Picasso resolutions are available from the standard ScreenModes program, all useable by OS friendly programs. The new Chunky option offers incredible speed with a 256 Workbench which is many times faster than AGA! All screens are stored in fast RAM, removing 2MB Chip RAM limitations. PicassoMode allows the creation of custom screens quickly and simply. Picasso II comes with TVPaint Junior and drivers for ImageFX, AdPro, ImageMaster, Real 3D and GIF, IFF, JPEG and MPEG viewers. Also included is the MainActor animation program.

PICASSO II .... **£299.95** **WITH TV PAINT 2.0 £329.95**

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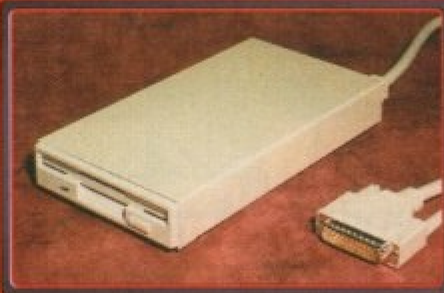
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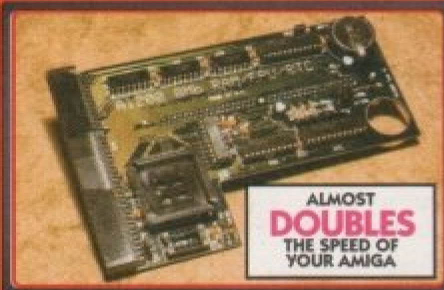


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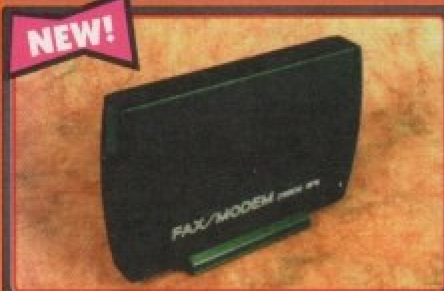
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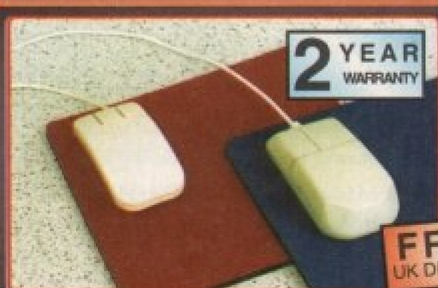
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Higher DPI

The common problem with many high-spec printers on the Amiga is the lack of a driver to take advantage of a specific model's special features. Owners of the Epson Stylus Colour printer can be reassured with Eyetech's release of the 720 dpi Amiga preferences print driver specifically programmed for the ink jet.

Normally costing £39.95, Eyetech are running a promotional offer of £34.95 for the package until February 28th. For more details on this and other special offers, phone the company on 0642 713 185.

* * * *

More Photogenics

After receiving critical acclaim from all quarters, Photogenics has now gained an upgrade. Almathera, distributors for the high calibre package, have released the 1.1a version of the program which offers new features such as any angle rotation from 0 to 359 degrees, a stellate paintmode, enhanced line art, emboss and shift RGB options and more.

The upgrade is free to registered users of Photogenics. Just send a 3.5 inch disk and a stamped addressed envelope plus your registration number to: Almathera, Southerton House, Boundary Business Court, 92-94 Church Road, Mitcham CR4 3TD.

* * * *

CanDo upgrade address

In last month's issue, we neglected to give the address for INOVAtronics in the CanDo offers details on page 26. The address to send your orders to is (credit card orders only remember):

INOVAtronics GmbH
Lise-Mietner-Str, 1
D-85716 Unterschleißheim
Germany

Their new telephone is 010 49 89 3211044. The fax number remains the same as before.

* * * *

Oops again!!

Carrying on in the great *Amiga Computing* tradition of making the tiniest of mistakes when handing out addresses and phone numbers, in last month's review of the First CD-ROM, the correct number for Prima Technology is 0532 311684.

Animation lessons

Anyone who has been following the Amiga for the last few months will know about Lightwave. For those people interested in doing more than just homespun work, London-based Premier Vision are offering a range of tutorial days where budding animators can come along and hear the latest tips and receive tuition. Costing £50 for the introductory course that lasts a day, users can expect a full briefing in the basics of 3D modelling, surfacing and rendering using NewTek's package.

For professional animators, there are also seminars, costing £200, covering the more intricate side of rendering. Included in the price is a sit-down dinner and expert advice from film and television company animators happy to answer any questions. Also expect discounts on Lightwave-related products.

For fanatics as well, there's a Lightwave User Group being set up for some serious networking and information straight from NewTek themselves who have given Premier Vision the thumbs up to start the official club. Included will be newsletters, discounts and other tempting offers for an annual subscription charge of £20.

Contact Premier Vision on 071-721 7050 for more details.

Improve your Amiga

For 600 and 1200 owners wanting to add to their machines, HiSoft have just released the Squirrel SCSI interface that plugs into the PCMCIA slot and allows up to seven SCSI drives to be plugged into an Amiga. The likes of a SyQuest removable drive, a CD-ROM, a DAT drive and more can be fitted and, because of the SCSI 2 interface, any peripherals can be used on other machines as well.

"The Squirrel offers all users, existing and potential, a future-proof way of adding powerful peripherals to their Amiga without locking themselves into a particular device." Commented David Link of HiSoft.

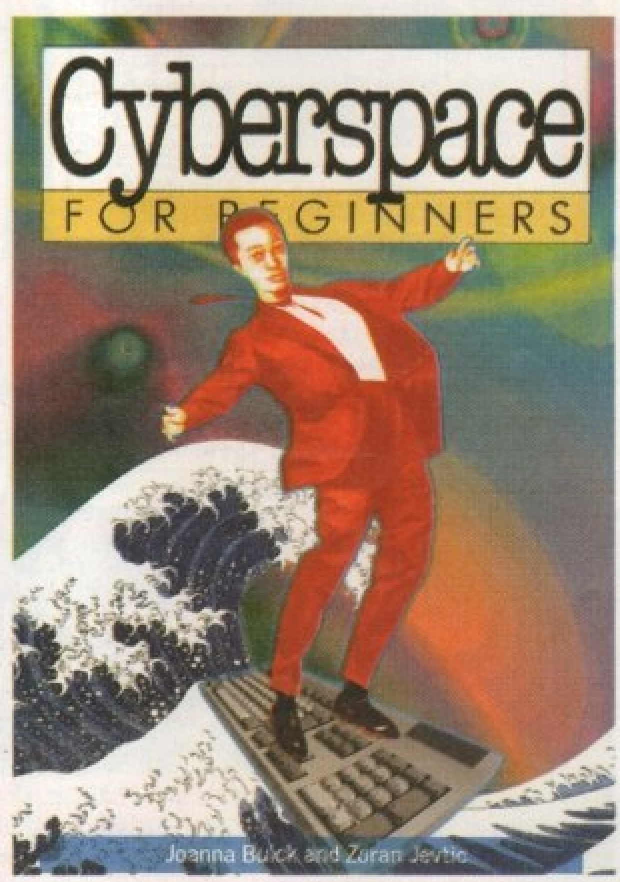
The Squirrel SCSI interface costs £69.95 and can be ordered on 0525 718181.

Multimedia 1200

With David Pleasance and co. planning to release a desktop version of an improved 1200 if their MBO goes through, HiQ, the mail order company, are beating their chests with the arrival of the 'Power Station' series for 1200 and 600 users. The top range multimedia setup provides the user with a converted computer case that has stereo speakers built in, two 5.25 inch and one 3.5 inch front-mounting drive bays, the Squirrel SCSI2 interface, a dual speed SCSI2 CD-ROM drive and a power supply built in to the case.

This particular setup costs £329.95. If that sounds a little above your cash line then there are various options for customers to create their own desired setup. The above is available without the CD drive system for £129.95, and a tower version can be snapped up for £299.95 which includes the CD-ROM drive.

For more information, call HiQ on 081-909 2092.



Cruise that wave

If this month's cover story has tickled your cyber fancies and you're ready for a dip in the cybersurf, then Icon Books are on the verge of releasing Cyberspace for Beginners, a book that ponders on that new parallel electronic universe.

Tracing the roots of the super information highway right through to the 'cybernetic revolution' of today, comments are also included about the political and social implications of identity and control in the electronic world order.

If this wasn't enough, the book takes a glimpse at the possible future when the highway turns from a B road into a full-blown super expressway.

For more details, contact Icon Books on 071-272 9053.

Cyberspace for beginners: A book to help chart the past, present and future of the new electronic universe

PAWS for the Amiga

USA

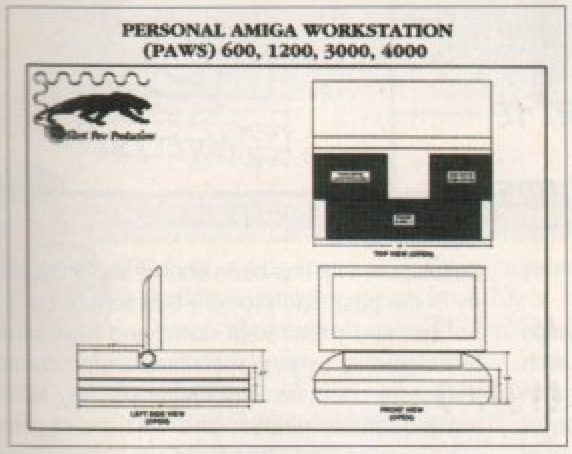


news

Denny Atkin goes portable with this new system for the Amiga and gets excited over a new development in the declining US games industry

Last month I mentioned any forthcoming portable Amiga setup from Silent Paw Productions in Virginia. Now the company has come forward with more details on the package, and hopes to ship it in March or April.

The PAWS (Portable Amiga WorkStation) actually uses your existing Amiga to create a portable system. Versions of the kit are available for the Amiga 600, 1200, 3000, and 4000. Due to the size of the Amiga motherboard, the kit is necessarily large – this is no notebook computer, but more a laptop for a large lap. The unit measures 14.5 inches wide, 14 inches long, and 4.5 inches tall (15 inches tall when the screen is open.)



The new PAWS package – more a laptop than a computer

The kits comes in four configurations, depending on the screen you choose. A 9.4 inch monochrome LCD screen supporting a 640x480 display is the least expensive, coming in at $1349. Next up is a 10.4 inch dual-scan passive colour LCD screen, also 640x480 resolution, which is priced at $1599.

If money is no object, there's also a 10.4 inch active-matrix colour screen that supports 1024x768 resolution available at $3299. If the system is going to be used for presentations, a version that uses an active-colour screen that shows NTSC video screen will also be available – no word yet, though, on a PAL version of this model.

The assembled unit will weigh in at about five pounds, and should sport about 1.25 hours of battery life. The first units will run off US-standard 110V power, but 220V support is coming soon.

Amazingly, the A3000 and A4000 PAWS' cases will also allow you to use your Amiga's internal expansion cards – now you can easily take your Video Toaster on the road!

Each package includes the laptop case with selected LCD display, a power supply, one battery, a transformer, keyboard, and trackball. Instructions are included with the case so you can install your Amiga's motherboard yourself and Silent Paw also plans to arrange dealer installations.

For more information on the kit, write to Silent Paw Productions at P.O. Box 1825, Manassas, VA 22110; call or fax (703) 330-7290; or write 71161.1565@compuserve.com via electronic mail.

Unicorn ride the games industry



Unfortunately, the commercial game development market for the Amiga is nearly dead. With a few exceptional exceptions – such as Fighter Duel Pro 2 – there's been almost no development of quality games on this side of the Pond for many months.

However, a small rag-tag team of programmers – spread across the United States but connected via the online networks – have joined together to create some hot new Amiga games. Called Dark Unicorn Productions, they seem to be using the Doom approach in promoting their software: Release a basic edition of the game online, and sell a much-enhanced version as commercial software.



Tomcat fast and serious

You may have already seen DUP's first game, Michael Welch's Scorched Tanks, which is now up to version 1.90. This takes the old Artillery program, pioneered on text-only display terminals in the late 1970s, and blasts it into the mid-'90s with 64-colour terrain, rocking music by Sidewinder (Eric Gieseke), and an amazing variety of weapons. The registered version sells for only $12.

DUP's newest game, Tomcat, is already getting lots of discussion on the online networks. This arcade shooter gives full-motion, third-screen video without a CD-ROM. You will need a hard drive for this extremely large game, though – the demo version alone weighs in at two megabytes!

The video looks good and the game requires fast reflexes; this is one for serious arcaders only. Tomcat's author, John Graham, assures me that the commercial version is extremely challenging, but doesn't require the hyperkinetic reflexes needed to survive the demo. An incredible bargain at only $15, this game is available now.



Flying Tigers

Coming soon from DUP are It's the Pits, a multi-stage arcade adventure with 3D combat sequences; Flying Tigers, an arcade helicopter shoot-'em-up that features intelligent wingmen and CD32 controller support; and Fleet Commander, another full-motion video game.

For more information contact Dark Unicorn Productions, 110 S. Cranford Road, #6F, Goose Creek, SC 29445; or call the Tombstone BBS at (803) 863-0313.

At the Helm

If you've been using Eagle Tree Software's Helm to create multimedia applications, you may soon have a much larger target market for your hypermedia products. The company has announced that they'll deliver a version of Helm for Microsoft Windows in mid-1995.

This is significant for Amiga users because all versions of the program will be file-compatible with each other, so you can still use your Amiga for development. Eagle Tree indicates that Helm will do almost all the conversion automatically.

A little further down the road is a version of Helm for the Macintosh – once it's released you can use your Amiga to easily develop for all the major platforms. Also in the works is Helm 2.0 for the Amiga.

And there's good news for European Helm fans – the product finally has European distribution. Eureka will now be marketing the product at a suggested retail of HFL 299. For more information, contact Frank Hoen, Eureka, Adsteeg 10, 6191 PX Beek (L), The Netherlands; or call 31 (0) 46370800, fax 31 (0) 46360188.

You can reach the developer at Eagle Tree Software, P.O. Box 164, Hopewell, VA 23860 USA; phone or fax (804) 452-0623.

Horses for courses

With Amiga International a step nearer to holding the reins of the donkey that was Commodore, can the new company turn the Amiga into the pedigree thoroughbred that it used to be? Adam Phillips ponders and postures



O bought a PC. A most heinous of crimes in the eyes of any true Amiga fanatic but I opened my wallet willingly and splashed out nearly two grand for what is basically a machine that's impractical in many respects, based on ancient technology and will probably be redundant in the next five years. Forget all the hype that a PC will last forever, that it's future proof – it won't and isn't, no computer can be. Motherboard designs change and become impractical to upgrade without ripping the whole machine apart and starting from scratch.

The buying decision was one of forced compromise, the most unpleasant of any financial expenditure. You're not going to find the standard of genlocking on a PC that you'd find on the Amiga, or even some of the 'multimedia' capabilities of a 1200. Short of Amiga International committing commercial suicide and licensing their technology to third-party manufacturers, the likes of Video Toaster are pipe dreams for PC owners.

So why did I do it? Simple – I wanted a machine that is guaranteed of a future for those five years, that has definite and assured support from a large base of software and hardware manufacturers and from a company that won't suddenly fall into bankruptcy and leave me wondering what the hell happened. For all its bugbears and horrendous operating inadequacies, that international support and the PC's sheer power are vital ticks on my buying list.

The Amiga, as we know it, has that kind of support but on a far smaller scale. There's a hell of a lot of respect for the machine – far more so than the PC. People will actually argue fiercely and passionately about its merits, whereas a PC owner will quite happily admit to their machine being a donkey with a speedy Intel inside, but smile at the fact their investment is guaranteed of a future in the short to mid term.

Many manufacturers throughout the Amiga's 'annus horriblus' that was '94, have by and large stood by the machine and continued to develop for it. The Cyberstorm 060 card, Lightwave Release 4, and Photogenics are just some of the high calibre products that have either arrived or are on their way to a vendor near you.

But there is still concern – that base of supporters is by no means large enough at the moment to turn the mass buying public's head away from the Macintoshes and PCs of this world.

So what of the Amiga's future if Pleasance and Co. win? Two years. Two long years in development. It's a lengthy period of time in technological terms. The next generation of Amigas is a mere blip on the consciousness of the computer world.

Talking to certain Amiga developers, one of their main concerns is the lack of new technology surfacing in the next few months. David Pleasance understandably seems happy to rely on existing hardware and third-party support – it would seem insane to cut off existing Amiga owners at the moment by producing a non-downwardly compatible system. But the fear remains that two years is simply going to be too long for punters who want power in their machines right now.

The question on every technophile's lips at the moment is: Could Amiga International survive the next 24 months? It's my hope that they Could. If Amiga International can return the respect and commitment to third-party developers that has been shown to the company in the past, can promise that schedules will be met and prices kept down and new cards for upgrading existing machines are produced the future could be very optimistic. Any faltering though, or delays, and we'll be reading about Amiga International like we were reading about Commodore during last year.

I genuinely hope that Pleasance and co. can do what they say they can, so that in five years time I'll be able to put that sacrilegious object, the PC, into a closet and buy an Amiga whose strengths should far outweigh the monopolising monolith, and do it all for a cheaper price.

Amiga International have the arduous task of turning their flagship machines of the present and the future from an enthusiast's computer into a fully fledged mass consumable product – Gallup's latest user base list in the UK shows the competition: Amiga: 2,215,000 PC: No overall figure but 160,000 were sold in just one month. If you win, good luck for the future, Amiga International.

AC

The AC team

EDITOR	Paul Austin
TECHNICAL EDITOR	Darren Evans
ART EDITORS	Tym Lecky
	Terry Thiele
NEWS EDITOR	Adam Phillips
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STAFF WRITERS	Jonathan Maddock
	Tina Hackett
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DISTRIBUTION	COMAG (0895) 444055
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Fax 0625 850652

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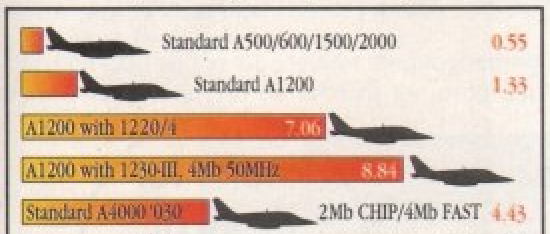
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De-archiving applications - Workbench 2.0 and above

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_2&3_Only drawer.

The de-archiving procedure has been much improved and now combines the power of the official Commodore installer program with that of Workbench 2.0 and 3.0.

The installer program is designed to be powerful yet simple for the beginner and features a user-friendly interface allowing you to de-archive programs with a minimum amount of fuss. The installer programs for Workbench 2 and 3 users can be located via the icons named:

```
Install[program name]
```

eg:

```
InstallPFM
```

To run, simply double click on the icon which will load up the installer program.

Using the installer

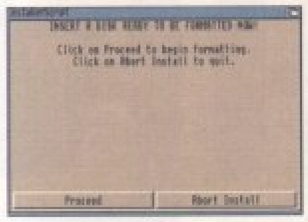
Ignore the buttons that appear when the installer program boots up and simply click on the Proceed button. The program will then copy the necessary files to RAM.

Once this has finished it will inform you that it is about to format a disk in DF0. Click on Proceed, at which point you will be told to insert a blank disk ready for formatting.

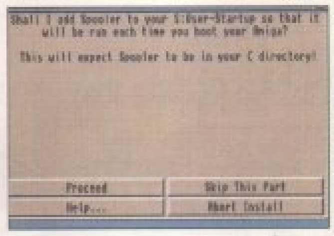
Once you have clicked on Proceed, the installer will indicate that it is formatting the disk in DF0. When this has finished, click on Proceed again to start the de-archiving procedure. When the application has been de-archived you will be told where the de-archived files are. Click once again on Proceed to finish.

If at any time you are unsure as to whether you want to continue installing, you can click on the Abort Install button.

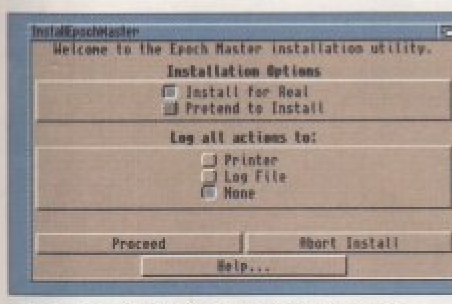
Occasionally, utilities may need to add instructions to your User-Startup file located in the S directory so that they will function correctly. If you want to add the instructions, click on Proceed when prompted.



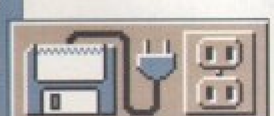
Don't forget to insert a blank disk at the prompt and before pressing Proceed



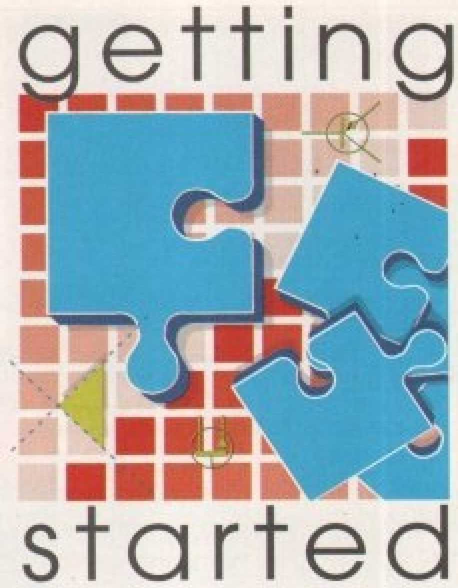
Any commands that need to be added to your User-Startup can be done with the press of a button



Don't worry about the installer options. Simply click on the Proceed button


The Workbench 2.0 and 3.0 installer icon

The Files drawer contains all the utilities set up so that you can use them from the CoverDisk. A Games drawer is also provided so that you can play these immediately. If you want to install the games make sure you copy all the necessary files across as listed in the CoverDisk pages.



The Amiga Computing CoverDisk is designed to be as simple to use as possible. Follow these instructions and you'll be up and running in no time!

We have now managed to fix the problem with AmigaDOS displaying a "disk is write protected" requester when a write-enabled disk is inserted. Just make sure you insert a blank disk when the installer programs tell you – and not before or after.

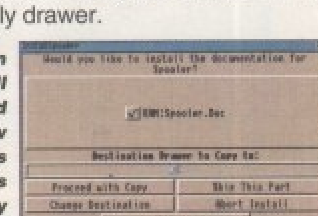
Installing utilities

The procedure for installing utilities is much the same as installing applications, except that you can boot from your hard drive or Workbench disk. As utilities don't need to be de-archived, you are asked to specify a directory on your hard drive or Workbench disk where you would like to install them.

If you don't want to install to the default directory you can change it by clicking on Change Destination. The Show Drives button will allow you to select a new device and directory. You can create a new drawer for your utility to go in by clicking on the Make New Drawer button and typing in the name.

You can also make a utilities disk by running the MakeUtilitiesDisk1.3 program located in the WB_1.3_only drawer and installing your utilities to here. At times you may be asked if you want to install a utility's documentation. A tick box indicates that the documentation is selected for inclusion, but you can click on the box to ignore it or simply click on the Skip This Part button.

The utility installer programs can be found in the appropriate program drawer in the WB_2&3_Only drawer.



You can easily install documents and create new drawer thanks to the installer's user-friendly interface

De-archiving applications - Workbench 1.3

Always boot from your CoverDisk when de-archiving applications. The installer programs can be located via the install icon with the appropriate name in the WB_1.3_Only drawer.

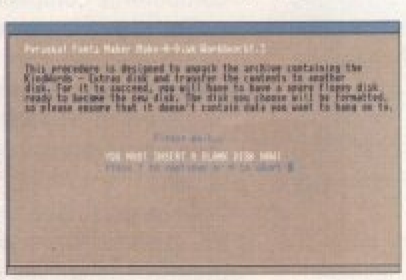
```
Install[program name]_1.3
```

eg:

```
InstallPFM_1.3
```

When you load up the 1.3 installer the program will first prepare itself ready to de-archive the program to a blank disk(s). You will then be asked to insert a disk to be formatted into DF0 and either press y to continue or n to abort.

Provided you answer y, the disk you insert will be formatted and the application de-archived.



After inserting a blank disk press y to continue or "n" to abort

Installing utilities

You should first run the MakeUtilitiesDisk_1.3 to format a blank disk called ACUtilities which will be used to store any utilities you eventually install.

This disk can be used with future CoverDisk utilities until it becomes full. The MakeUtilitiesDisk1.3 program will be a permanent feature of the CoverDisk.

To install any utilities, boot your machine with your CoverDisk inserted in DF0. Utilities can be installed by clicking on their install icon found in the appropriate drawer in the WB_1.3_Only drawer. You cannot specify their destination and any additions to the Startup-Sequence must be done manually.

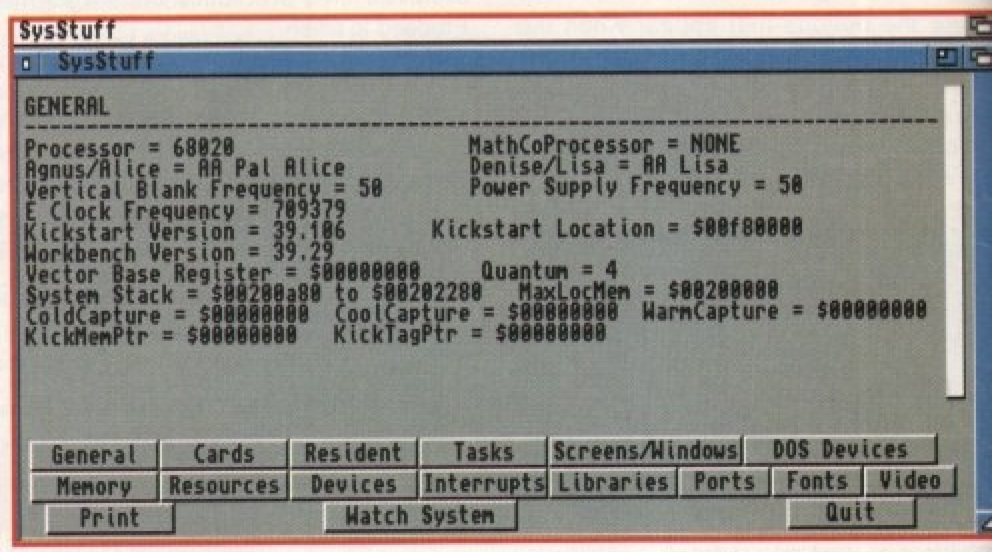
When installed the utilities are copied to a drawer called ACUtils on the ACUtilities disk.



THE Cover...

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Dir Work lets you examine exactly what your ststem is comprised of



The first thing I noticed about my shiny new Amiga when I bought it oh so long ago was that you definitely needed a hard drive to make it remotely usable when fiddling with Workbench. The second thing was how tedious and frustrating it was working with all those files once I did get a hard disk. You really need to keep your hard drive and its contents in some semblance of neatness if you are to avoid problems.

Using Workbench to copy files and drawers from one place to another or to start off on a round of renaming is not exactly the best way to go about things. Lots of menu accessing, typing and button pushing is involved.

To make life easier when using your Amiga to copy lots of files and directories and generally fooling around with floppy disks and hard drives, you need an easy-to-use and powerful utility such as DirWork. DirWork is a totally configurable general purpose utility which makes manipulating files extremely easy. A host of file manipulation functions are available at the quick click of a mouse button. Renaming, deleting, copying and moving directories and files are just a few of th tools available.

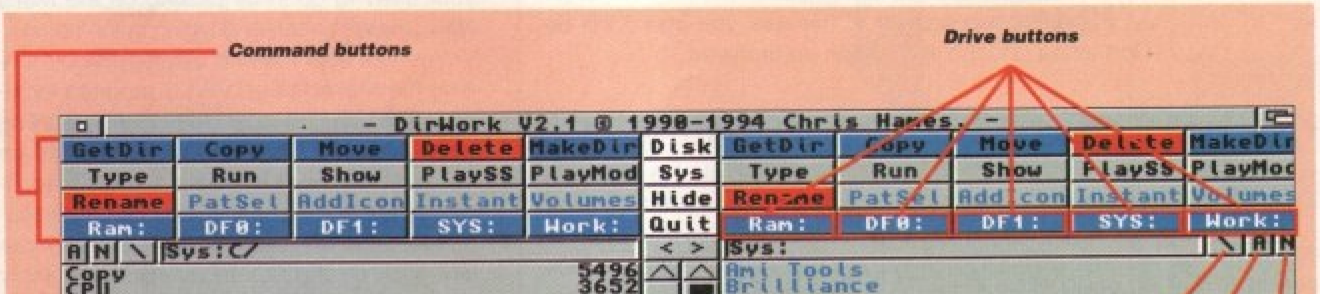
Life becomes that much easier when fiddling with files once you have DirWork and its many features at your fingertips

DirWork also provides other usefu facilities. For example, you can double click on a text file and instantly read using the built-in editor. You can als arrange for your favourite text editor to b loaded when you click on a text file, wit the selected file ready for editing once has loaded. You can even play soun and music files as well as view pictur files.

There are information features such a the system information command whic shows you just what your beloved Amig computer is comprised of.

The CoverDisk version is a function demo with only the Save features di abled and an extremely persistent me sage which appears informing you th you are indeed using a demonstratio version.

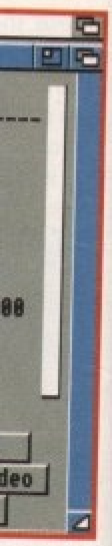
Once you have the DirWork disk crea ed, load up Workbench, put the DirWo disk in the drive, double-click on th DirWork icon and away you go.



rDisks

Make your Amiga life easier with this demo of DirWork 2, a file manipulation utility from Meridian Software, plus we give away other demos including Driving Test and Pucman

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Driving Test demo

Supplier: Ten out of Ten Educational Systems

If there's a specific period of time in my life that I would consider traumatic and excruciatingly tedious, it was that period I spent learning how to drive a car.

The actual driving lessons were OK, after all, here I was in a potentially lethal vehicle, hurtling down narrow roads. Great fun. The horrors started when I realised I had to wade through the highway code book in preparation for the examiner's inevitable questions on those obscure road signs.

I would put the interest level of reading the highway code book on an equal footing with having to read a phone book from a mile away using a telescope, while at the same time having to turn the pages by waiting for a bus to arrive to take you to the phone book and then back to the telescope.

It's little wonder that your average mild-mannered individual sometimes transforms into an ill-tempered and aggressive monster when behind a wheel – it all stems back to the psychological damage inflicted by the highway code book.

If only clueing up on the highway code was a little more fun. Well, thanks to those jolly nice people at Ten out of Ten Educational Systems, the learning process is now a little more interesting.

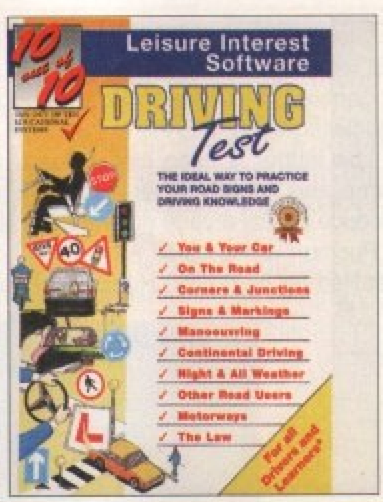
We reviewed the complete package last month, where it got a healthy overall rating of eight. So, now's your chance to see just how much you know about those obscure road signs with this demo version that allows you to play one of the six games from the full package. Once up and running, simply click on the button marked Signpost and you are taken to the game menu. Click on the Play Signpost box and your off.

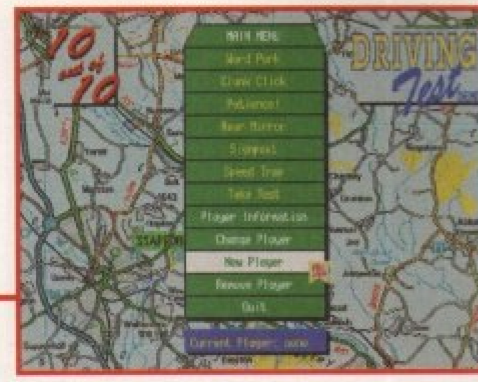
You will be presented with various questions ranging from the purely textual through to graphic recognition of actual signs. Get a question right and you can blast away a square from the grid box at the top of the screen in order to reveal parts of a hidden road sign. You can then take a stab at what the actual hidden sign is by choosing from a list of possible answers.

If such software was available when I was taking my test, maybe I would have retained a little more of my sanity.

Special offer

If you would like to buy the complete version of Driving Test, turn to page 28 where you can find details on how to order this great educational title

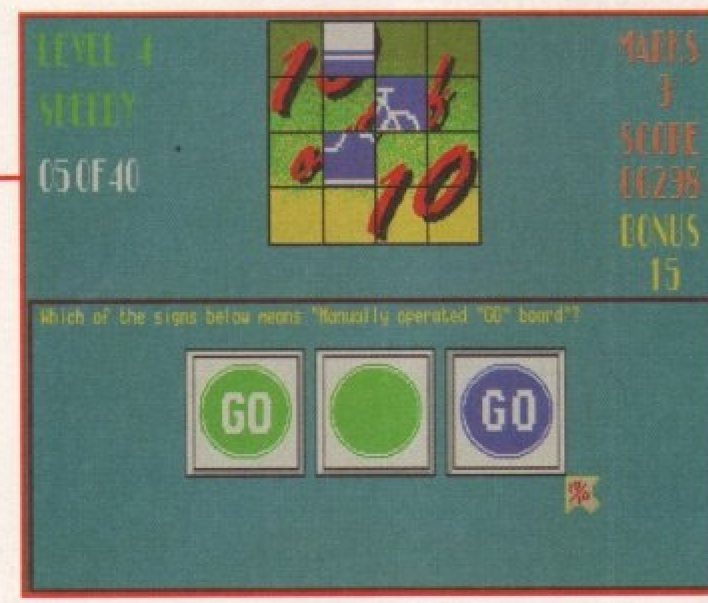




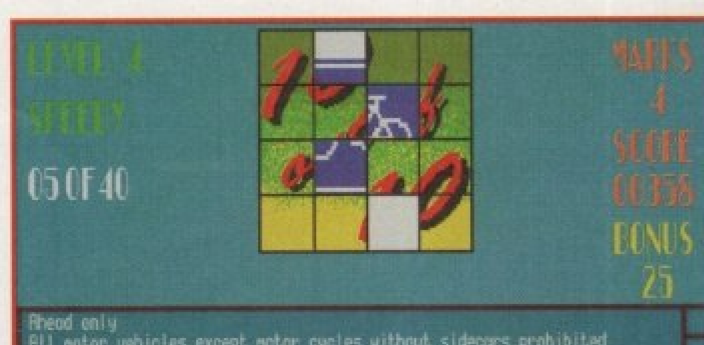
Before play begins, you will first have to enter your name. Then click on Signpost to get down to some brain exercise



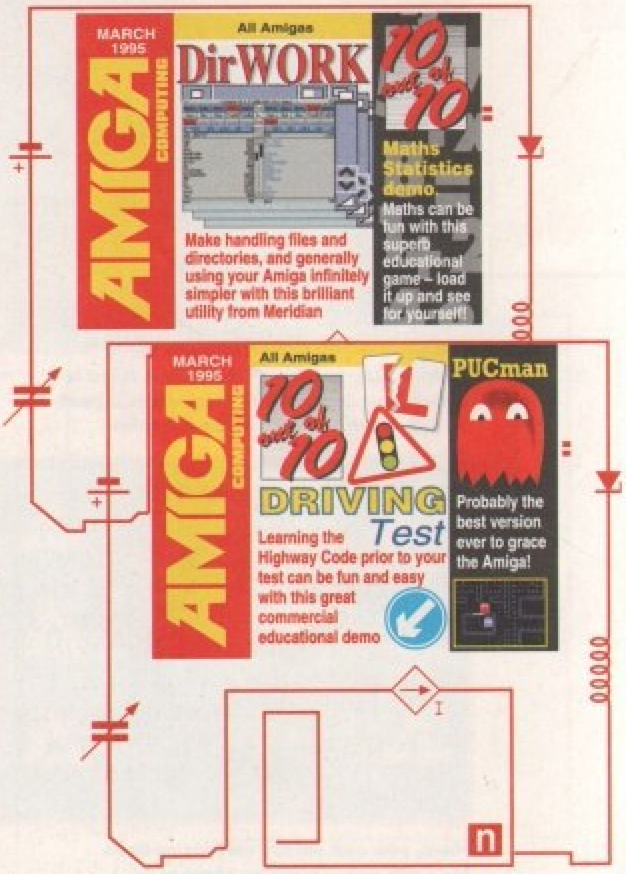
Here, you can select various options for each game such as number of questions, grid size and others



Pictorial questions as well as textual ones will test your motoring knowledge in a trivia-type manner



Once you answer a question correctly, you can blast away a grid square and have a go at guessing what the hidden sign is



Pucman

Every so often, someone somewhere does a really good version of a classic arcade game that is worthy of a mention. Pucman, from Augenblick, is one such version. Featuring silky smooth animation and great sound effects, this game brings back those fond fun memories of youthful days, and coins, wasted at the local arcade.

There are actually two versions on offer in Augenblick's cracker – Classic Pucman and Pucman+. The classic Pucman version plays and sounds like the real thing, while Pucman+ features two-player co-operative or competitive mode.

The CoverDisk version features only the first few levels of play, but to get hold of the full version simply send off £6.50 to Augenblick, 334 Marton Road, Longlands, Middlesborough, Cleveland TS4 2NU.

The author is keen for feedback on the game and for any other authors who can produce quality arcade games like this.

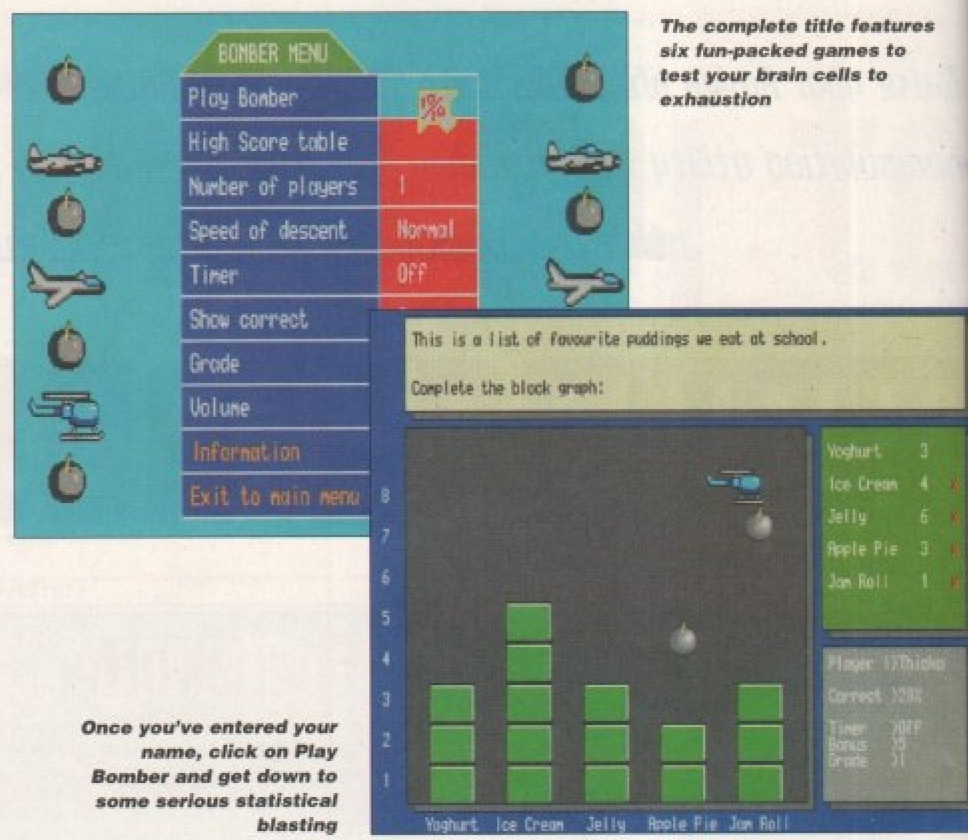
Pucman works on all Amigas and can be installed on hard disk. However, if you only have half a megabyte Chip RAM and Hal Meg Fast RAM, the game cannot be ru from Workbench and must be booted fron disk. Also, for AGA machines, the KillAGA utility must be run before it will work. A400 users must hold down the left mouse butto to run Pucman if booting directly from th disk.

Maths Statistics demo

Supplier: Ten out of Ten

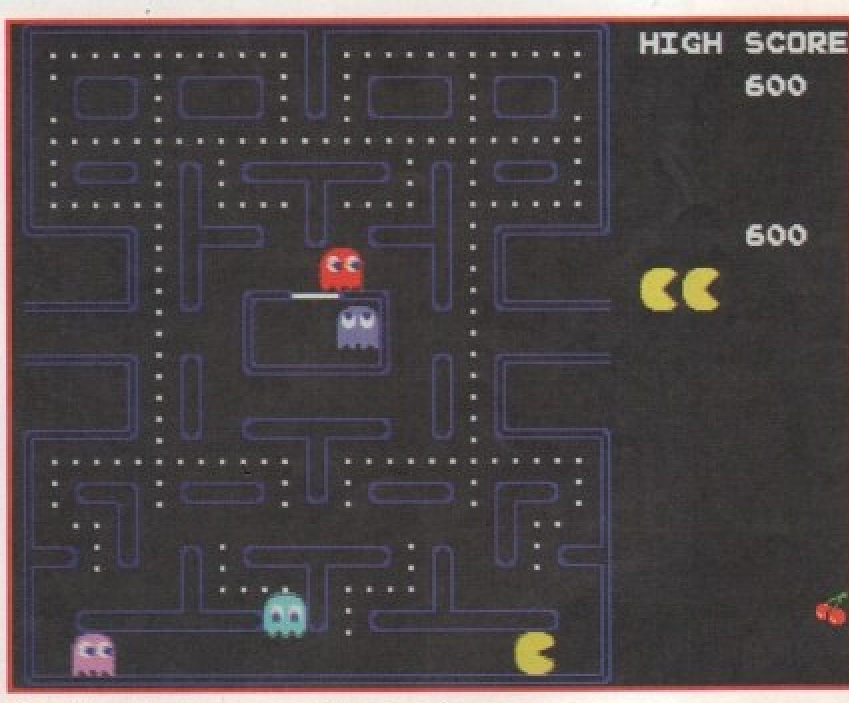
Is it possible I ask myself. Can Statistical maths be taught in a fun and enjoyable way? A tall order indeed but if any one can Ten out of Ten can.

If there is anything remotely close to the aforementioned tedium of enduring drivin lessons and tests it's got to be statistical maths. I vote that with computers being common place in our every day lives, the only thing to be taught in a statistical maths class is how t

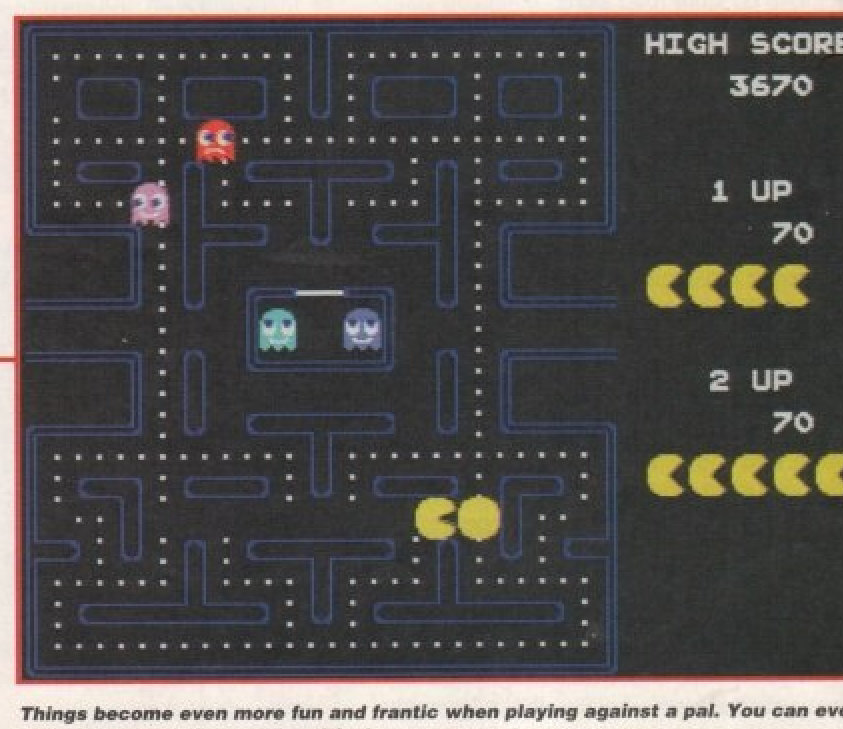


The complete title features six fun-packed games to test your brain cells to exhaustion

Once you've entered your name, click on Play Bomber and get down to some serious statistical blasting



It may be quite a few years old, but when it comes to downright fun, Pucman is a great game



Things become even more fun and frantic when playing against a pal. You can ever play co-operatively or competitively

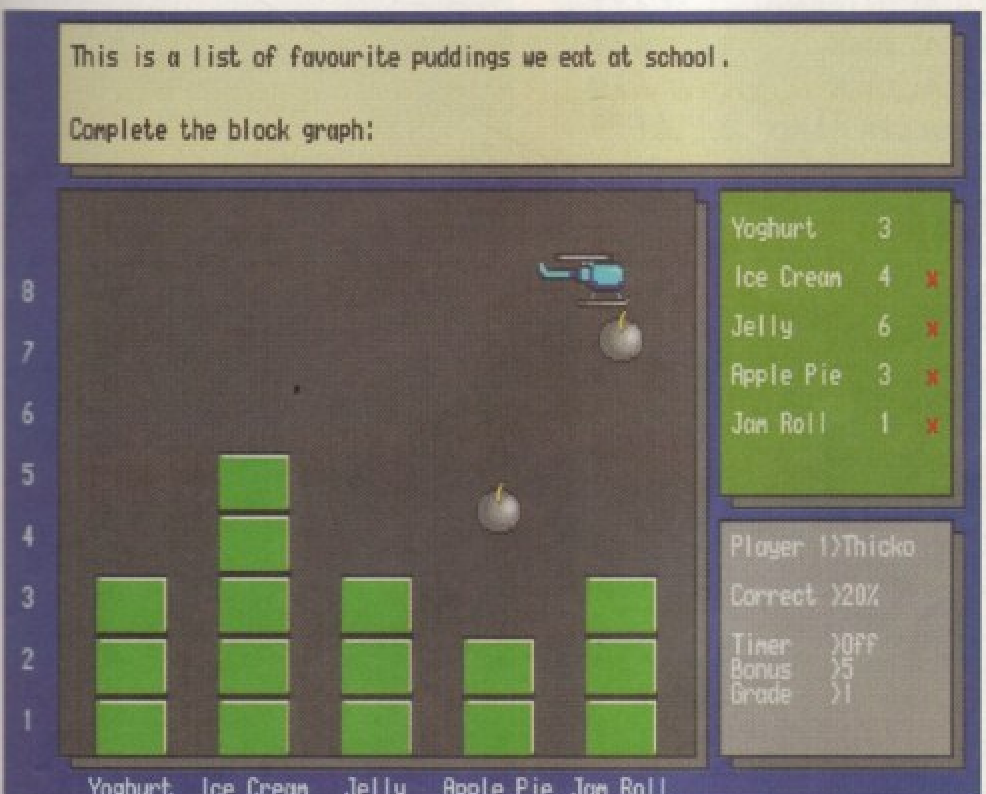
tell the computer to do it for you. All in favour. I think the ayes have it.

Until then, the only way to have anything resembling a good time brushing up on your statistical maths skills is to get hold of this title.

In this demo version you can play Bomber, one of the six games from the complete pack. The aim of the game is to match the graph figures to the correct values by either dropping extra units onto the stacks or by dropping bombs to blow up units on a stack.

Pressing the right mouse button adds a unit to a stack while the left mouse button drops a bomb and blows a unit to kingdom come.

Once you have completed a game, you can then select a higher grade for a different type of graph.



To win the game, the number of blocks in each stack must match the figures listed on the right of the screen

Faulty CoverDisks

If you should find your *Amiga Computing* CoverDisk damaged or faulty, please return it to:

TIB Plc, TIB House, 11 Edward Street, Bradford, W. Yorks BD4 7BH

Please allow 28 days for delivery

Fractal World

Author: Peter Spinaze

That Benoit Mandlebrot has a lot to answer for. All those colourful images of strange chaotic patterns are down to this guy. Of course behind all these strange patterns lies the mysterious realm of Chaos Theory.

I'm not about to embrace a sizeable headache in trying to explain what Chaos Theory is, so just take my word that it's all very peculiar.

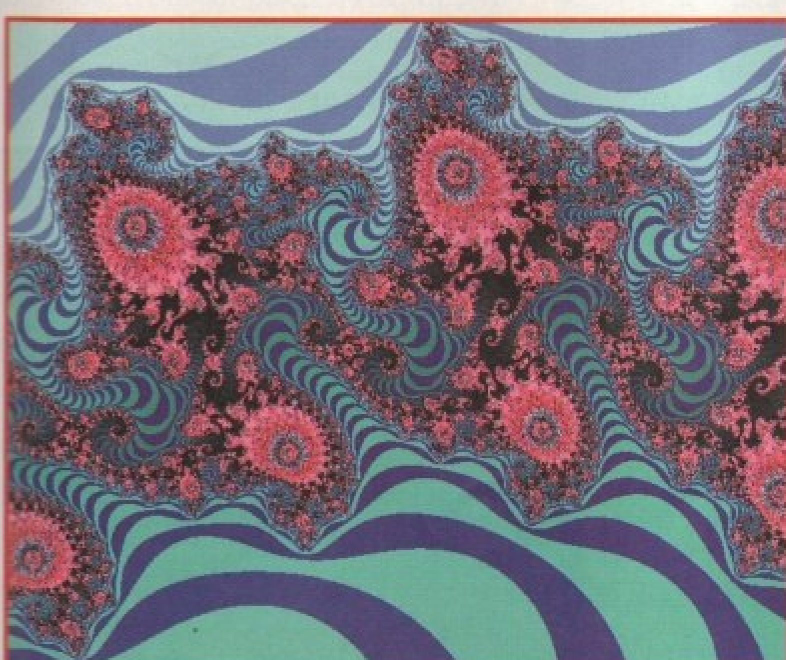
Essentially, I suppose you could say that the fractal patterns this program can produce are the visual representation of chaos. Once the program is up and running, simply click on the Render button and the Amiga will start to draw a fractal pattern. Once the pattern is completed, use the Zoom function to select parts of the image for a close-up view. The strange thing is that no matter how many times you zoom into the image, there is always a wealth of hidden detail which springs forth.

If you could extend your life indefinitely, you could keep zooming in for ever and still not reach any kind of final end. There are even copies of the original pattern hidden within the hidden detail.

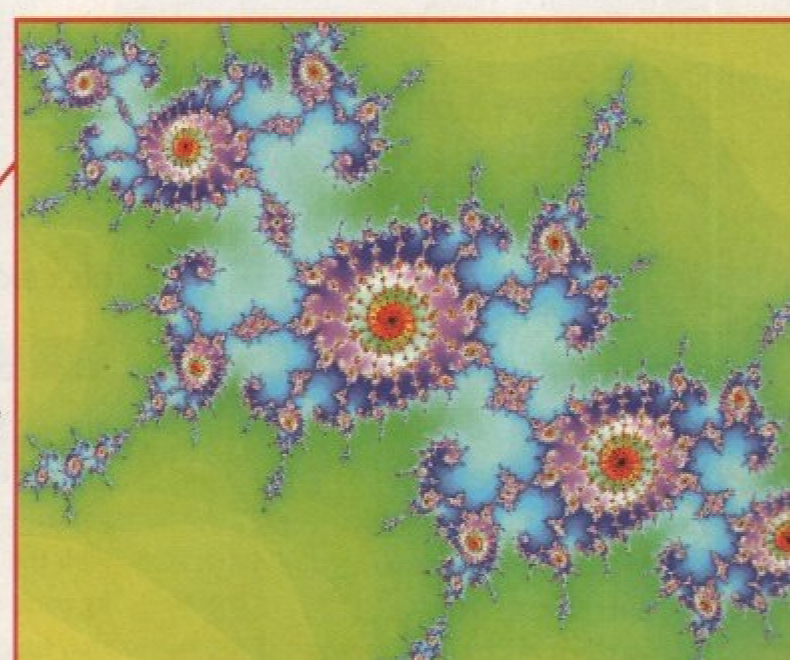
The mathematical formula that produces these patterns is deceptively simple – it's X squared + C – but it surprised the hell out of many mathematicians when it was studied. It was when this mathematical formula was used with computers and computer graphics that these patterns became so popular.

To explore this strange world, load up the program and experiment. There is an on-line manual within the program which is accessed from the Project menu. The manual also has a simple tutorial which explains how to use Fractal World.

Fractal World allows you to use numerous resolutions and colours for your creations, but remember, the higher the resolution and colours, the longer it will take to draw a fractal set.



Just two examples of the kind of strange and colourful images that can be found within the world of fractals



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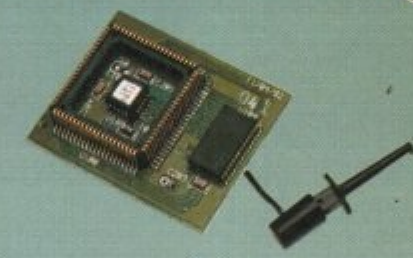
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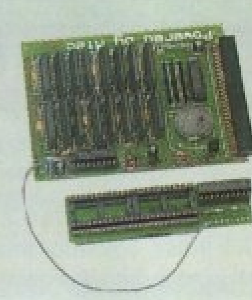
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- Compatible with all Amigas

System Requirements
2.04 ROM or above, Minimum 1MB
Recommended 2MB or above
*Only available on Colour PowerScanner 4

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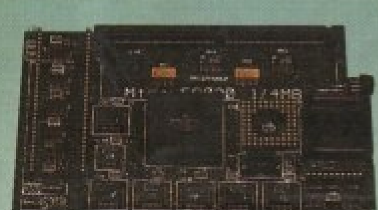


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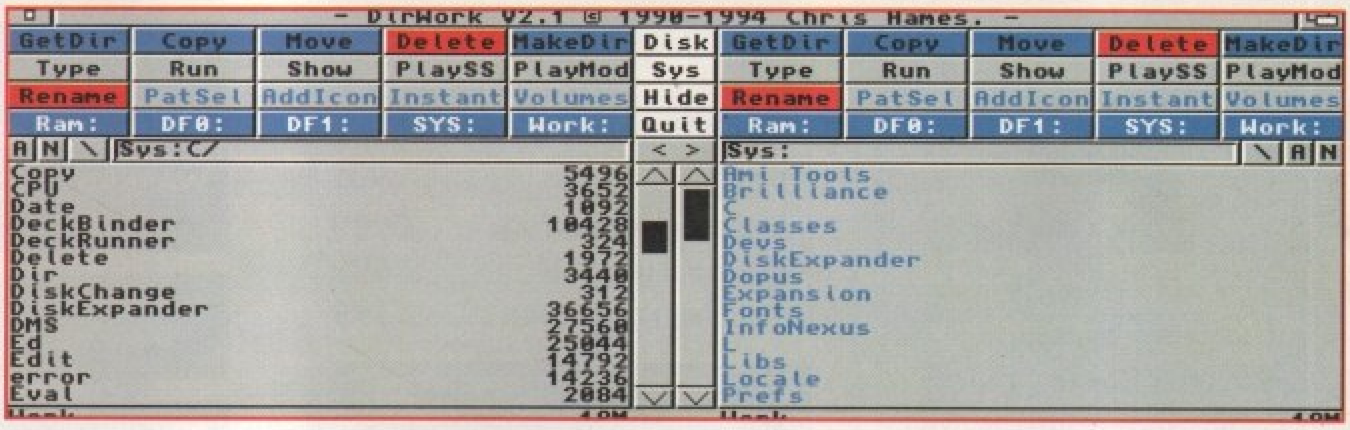
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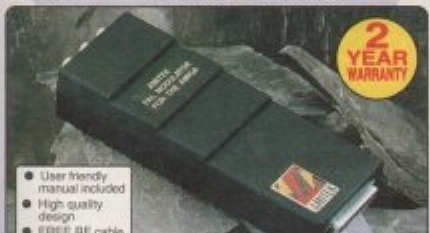
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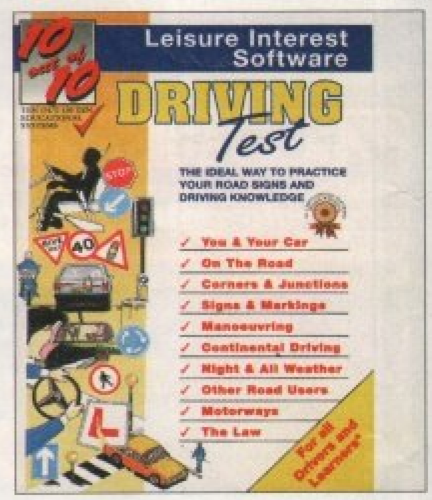
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10 out of 10 Driving Test is demonstrated on this month's CoverDisk. Once you've tested it out you can save £5 on its normal price with our special offer. Driving Test comprises six games plus a unique test, both designed so that you can have fun as you learn, and revise or test your knowledge on many of the essential facts of driving. You can choose, from over 2000 combinations, the specific area(s) you wish to work on, and can progress at your own speed – your progress being automatically recorded as you play the games.

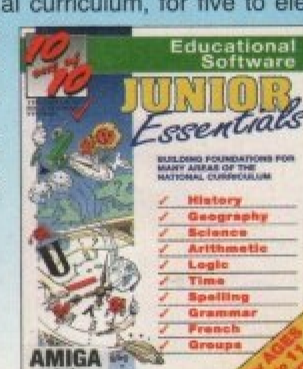


To add to the fun you can even choose one of the six categories of trivia questions or test your skills on the continental levels. You can also try the 1000s of questions in the suite, but without the games. This is the ideal way to practise your road signs and driving knowledge before your test – and if you've already passed you'll be surprised by the challenging higher levels.

We're also offering Junior Essentials

Normal price: £25.95
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Junior Essentials is a great piece of software to help build foundations for many areas of the national curriculum, for five to eleven year olds. Six expertly designed educational games cover the areas listed here. Progress is automatically recorded. The programs are fun for single players or groups, with no input from parent or teacher needed, and include:



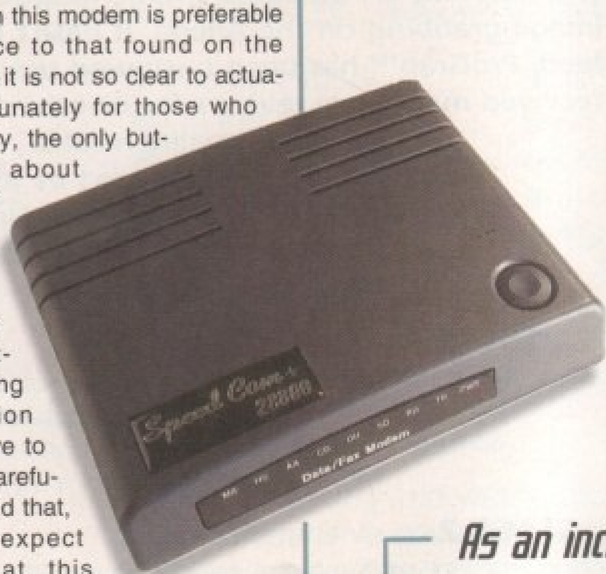
- *History*
- *Geography*
- *Science*
- *Arithmetic*
- *Logic*
- *Time*
- *Spelling*
- *Grammar*
- *French*
- *Groups*

Speedcom 288

Price: £214.99
Supplier: Siren
Tel: 0500 340548

To begin with those all-important aesthetics, the Speedcom has an unusual and attractive styling. Compactly formed and encased in a sleek black shell, this is a good choice for those with limited desk space.

The facia on this modem is preferable in appearance to that found on the Sporsters, but it is not so clear to actually read. Fortunately for those who crave simplicity, the only button to worry about is the on/off switch.



It has to be said that the unit is rather lightweight, leaving the impression that it will have to be handled carefully. Having said that, you can't expect everything at this price.

Installation was extremely simple and we had no problem logging on to a variety of BBSs with various baud rates. When connected to another 28,800, the Speedcom's performance admirably does its name justice. Downloading a file takes about half the time it would take with the 14.4.

For the beginner, an extensive manual is provided but it is the software included in the package which makes it stand out as a particularly good introduction to the area.

Not only is the modem supplied with NComm but there is also a Comms guide disk. This is of a high standard, providing invaluable advice and information to anyone relatively new to the Comms scene.

Despite the bargain price, this package has all the latest features thrown in including MNP 5 error correction and full backwards compatibility with slower modems. There's also a fax facility, though remember you'll need to obtain separate GPFax software.

By importing the units themselves, Siren have managed to keep the prices down on a unit with a lot to offer. In short, it's a well supported quality modem that is ideal for newcomers to the comms field who want the best facilities.

Ease of Use	**9**
Quality	**8**
Value	**9**
Overall	**8.5**

● Not BABT approved

In the world of serious computing, nothing in recent years has received more attention than the Net. Already connecting thousands of users worldwide in on-line communication, its importance for the future seems hard to over-estimate.

What can easily be forgotten is that none of it would be possible if it wasn't for the modem. Without them data could not be transferred between computers, and the global community of on-line users would never have existed.

The efficiency of on-line activity for any user will have a lot to do with the speed and quality of the comms equipment they are using. It's an area in which the technology is improving at a prodigious rate, and fortunately, prices are falling just as quickly – good news for potential beginners.

There are a lot of modems out there to choose from. Unfortunately, Amiga owners must be particularly careful because most packages are biased towards the PC market. It's for this reason that the modems below are products from distributors who can supply advice and support for the Amiga.

The baud

As an increasing number of people seek access to the Internet, the value of the humble modem becomes ever more apparent. Gareth Lofthouse puts the best to the test



US Robotics Courier v.34

Price: £317
Supplier: 1st Computer
Tel: 0113 2319444

The Courier is housed within a slender black casing with a spine of ridged air vents designed to cool the mechanism without allowing too much dust to get in. It should be said that it leaves quite a large footprint compared to the other modems reviewed.

As far as speed goes it compares admirably with its rivals, but it is the unusual additional features that justify the Courier's higher price. On the other hand, its plastic casing was not as tough and secure as the metallic opposition.

Robotics are claiming that this is a 'V. everything' modem, and it certainly is uniquely versatile. Because it uses protocols from Rockwell rather than the actual Rockwell chip set, they were able to make it compatible with both v.fast and v.32terbo modems.

To overcome the problems of poor quality telephone lines, the Courier has an Adaptive Speed Levelling (ASL) feature. This means that, as with most modems, it will slow down if the phone line quality deteriorates.

ASL does more than this, however, because incoming and outgoing channels will adjust independently to line conditions. In other words, if transmission is impaired in one direction more than in the other, the modem will set up a split baud rate. The major limitation on this feature is that it only works with other machines supporting ASL, but it's a bonus all the same.

If this wasn't enough, there's also a voice/data switch which is conveniently mounted on the front, Quickconnect for faster handshaking with other modems, and automatic fax/data detection.

This is the modem for the serious on-line user who wants all the best features. Slightly more pricey than the other modems reviewed, it's still good value if you want the extras.

Ease of Use	**8**
Quality	**8.5**
Value	**8**
Overall	**8**

● BABT approved

Glossary

Baud Rate – For the tecchies among you, this represents the number of discrete signal events per second occurring on a communications channel. To everyone else, it's a measure of your modem's speed
BABT – Approval standard for British Telecom
Carrier – The signal a modem listens to that indicates there is another modem on the other end of the line
Download – To receive a file from another computer via the modem
Handshaking – Control signals that modems use to start and stop the other modem sending data. Also known as flow control
Hayes command set – The commonly-adopted standard set of modem control commands, designed by Hayes
ITU-T – The governing body for international communications
Protocol – Developed to solve transfer problems
SysOp – System operator
Upload – To send a file from your computer to another
V34 – The ITU-T standard for communications at 28,800 bps
ZModem – Currently the most commonly used transfer protocol

meeting

Supra 288

Price: £229
Supplier: 1st Computers
Tel: 0113 2319444

Don't be put off by this modem's austere appearance. Its uncoloured aluminium coating may look unfinished, but it remains a smart and simple unit with a reassuring solidity that makes more expensive plastic rivals look light weight.

Instead of the usual panel of LEDs, the Supra has an alpha-numeric status display which will indicate over 30 messages. There are, however, four other indicators which can light up simultaneously.

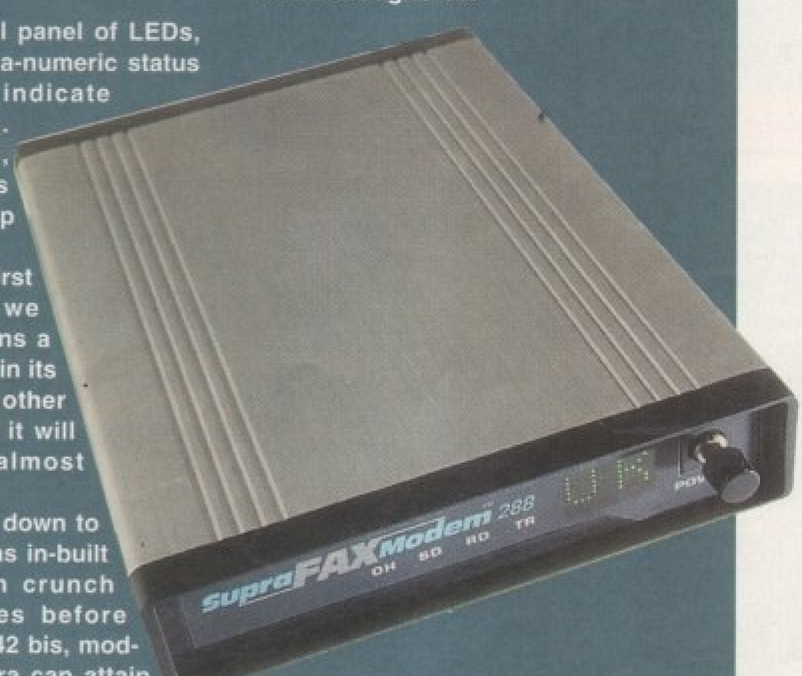
The Supra was the first v.fast modem we reviewed, but it remains a very strong contender in its price range. Like the other 288s, it's so fast that it will send information almost instantaneously.

This speed is partly down to the way the modem has in-built hardware which can crunch information and files before transmission. Using V42 bis, modern units like the Supra can attain 4:1 data compression ratios allowing for up to 115,200 bps throughput.

MNP 10, a new protocol which allows for connections with cell phones, has also been included, and this has tougher error correction to cope with the greater line quality problems this type of communication involves.

Other plus points include a large, comprehensive manual, full compatibility with the Hayes command set, and automatic rate negotiation which connects at the highest possible speed for the modems and phone lines used.

Compact and durable, simple but stylish, the Supra is endowed with everything you could wish for from the latest wave of modems, all for an impressively low price tag. Basically, it's nothing less than an affordable on-line thoroughbred.



Ease of Use	**8**
Quality	**9**
Value	**9**
Overall	**9**

● Not BABT approved

Aceex Faxmodem

Price: £199; With Trapfax, £239
Supplier: Power Computing
Tel: 0234 273000

Do the folk at Power have larger desks than the rest of us, or is it that they think big is beautiful?

I ask because their contribution to the floppy drive round-up a few months ago was rather hefty, and now their modems are looking bulky in comparison to their mini-modem opponents.

That, however, is where the fault-finding ends. This unit's design has always been admired and now the new 288s are revved and ready to hit the high street.



The brushed aluminium casing makes the Aceex comparable to the Supra when it comes to toughness, while the curved status screen is a strangely flashy addition to an otherwise utilitarian appearance.

When it comes to compatibility, Power's modem covers the usual bases, and V42 and MNP error correction and data compression are available, as should now be expected.

The Aceex also has a non-volatile memory that eliminates the need for some switches and jumpers found in other modems. This feature allows frequently-used operating characteristics to be stored on memory even if the modem is switched off.

It's also capable of leased line operation and can store up to three telephone numbers in memory, each with up to 33 characters.

Where Power's offering excels, however, is in the fact that they've managed to provide a good quality product at a stunning price. If you're not concerned about size, this is an outstanding contender.

Ease of Use	**8**
Quality	**9**
Value	**9.5**
Overall	**9**

● Not BABT approved

USR Sporster 288

Price: £279
Supplier: 1st Computing
Tel: 0113 2311944

First impressions count for something, and it has to be said that the Sporster's exterior is doing it no favours whatsoever. I couldn't decide whether it looked more like a stylophone or Barbie Doll's Hammond organ, but one thing's for sure: It doesn't *look* like its going break speed records.

It's aimed at the user who wants to plug in and get on-line with the minimum of fuss, so installation is supposed to be easy. However, though there's a quick guide to help, I didn't find it any more accessible than most.

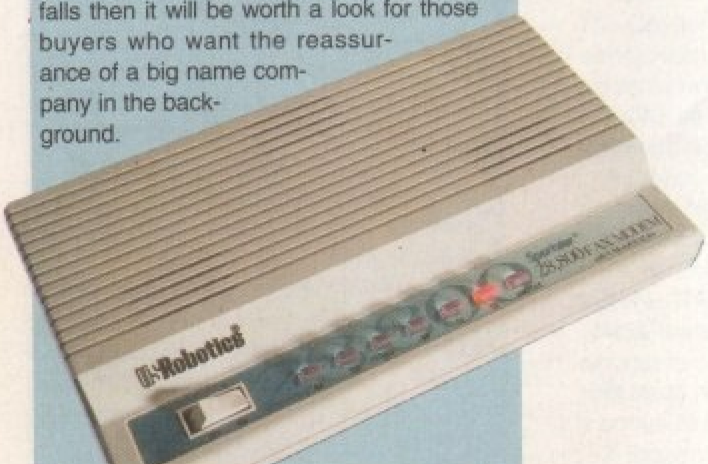
On the plus side, it worked as efficiently and swiftly as any of its competitors on test, and if the 14.4 is anything to go by it should be perfectly reliable. The fact that it comes with a five-year warranty should give buyers some confidence.

It's also the smallest modem of all which could make it good news for users who are already juggling a number of peripherals around their Amiga. Furthermore, though the LED lights may be unsightly, they are clearer than the indicators on some of the other modems.

Like the Courier, the Sporster has v.42 bis as well as MNP 5 data compression – that's good news since the former type is apparently more efficient. Though it's not as flexible as its more expensive stablemate when it comes to backwards compatibility, we had no problems roaming around the BBS sites.

As with all the other fax modems, if you have the right software you can use the Sporster to send fax messages directly from the computer. This method is arguably better for quality than using the standard fax machine.

Despite its perfectly admirable specifications, however, I can't help feeling that this modem is currently overpriced. It looks and feels tacky, and unfortunately this isn't acceptable anymore, even in the low-end of the market. If, on the other hand, the price falls then it will be worth a look for those buyers who want the reassurance of a big name company in the background.



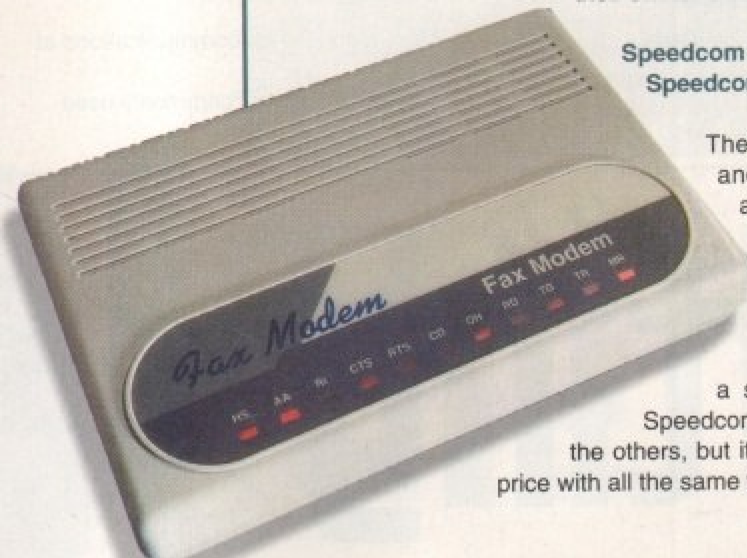
Ease of Use	8.5
Quality	8
Value	6
Overall	7

BABT approved

Cut-price Comms

For anyone who is going to spend a lot of time on-line, we recommend that you get the fastest modem you can afford, because the quicker your modem is, the less money you'll have to cough up for phone bills.

If, however, your access needs are more modest and you don't fancy spending upwards of £200, the slower modems are now going at very reasonable prices. Up until recently they were all considered very fast, and most of them have the same features as their swifter brothers.



Speedcom 144 £125 **Siren:** 0500 340548
Speedcom 192£165 **Siren:** 0400 340548

The 144 looks exactly the same as the 288, and incorporates the same error correction and compression facilities. It's also Fax class 1, 2, and 3 compatible and comes with that invaluable Comms guide, making it an inexpensive introduction for the less serious user.

More unusual is the 192, running at a speed somewhere between the other Speedcoms. It's as compact but not so well styled as the others, but it's a good compromise between speed and price with all the same features.



USR Sporster: 14400 £140
1stComputers: 0113 231 9444

Identical to the newer model except in speed, this one's worth a look thanks to the fact that it's more competitively priced.

Supra: 44 £170
1st Computers: 0113 2319444

Well made and endowed with all the modem extras – but personally I'd save that bit extra to get the 288.

Reduce your on-line charges

- Ensure you buy the fastest modem you can afford. The slower the modem the more time you spend on-line.
- Use your Comms software's capture facility to have a good look at the layout of a board and familiarise yourself with keyboard commands before your next call.
- Mercury charges less for long distance calls.
- Archive (compress) your files. Files on a BBS will take a shorter time to upload/download if they've been archived.
- Call at cheap or weekend rate.
- If you read lots of messages get some off-line mail reading software. Your SysOp will be able to help you set this up.

World at your

As the much-vaunted Internet takes off this year, its flight ably assisted by hot air from all sides, Stevie Kennedy takes a look at what it offers to Amiga owners



If you had mentioned Internet in the pub only 18-months ago, your social life would have been at an end. Friends would have shuffled away from you, chosen another table, and muttered about anoraks and computer bores. These days, however, an e-mail address is hip and trendy, and macho types can now boast with safety about the speed of their modems.

The problem with trying to describe the Internet, however, is that it doesn't actually exist as a single physical 'thing'. It's really just the sum total of what it is used for, and you couldn't point to a single site or huge computer and say "that's the Internet."

Ironically, considering Internet is supposed to be the last realm of truly free speech and mass communication, the fledgling system grew from a US government defence initiative. In 1969, the Defense Department's Advanced Research Projects Agency (ARPA) linked just four sites together in the ARPANET, in an attempt to create a communications network which could survive a nuclear attack, lose several of its main sites, and still function.

In time, universities across the world started to follow the lead (the UK's inter-university system is called JANET), and when all these networks started talking to each other the Internet was born. To this day, the majority of net users are academics and scientists, and a large proportion of Internet sites are in universities, colleges, or military establishments.

The myth of the digital superhighway comes closest to fulfilment with the Internet, and as commercial services and private users begin to make up more and more of the traffic on this highway, the cost of using it is falling faster than John Major's credibility. Modems capable of 14,400 baud used to cost £600 or more, but they can now be found for less than a third of that price, and connection to the global network can cost as little as £5-£10 a month (see costs panel).

ACTIVE ACCOUNTS

Setting forth into this brave new world can be as simple as making a phone call to one of the UK-based service providers such as Almac, Demon, or Pipex, ordering an account by credit card sale, and waiting a few hours for the account to become active. It's then a matter of just phoning your service provider's closest 'PoP' (Point of Presence – a computer attached directly to Internet) and typing in your password.

And if you believe that, then I've got this second-hand Lancia in great nick. It's a bargain at £1200 and there's only a little bit of rust...

The easy-peasy part of joining Internet ends as soon as the modem at the other end of the line answers your call, and from here on in the beginner can feel completely lost. This is usually because most new users have only a vague idea of what they want to do with their Internet account. Beyond e-mail – which is admittedly the most useful thing about Internet – most of us have an "er ... you can download stuff, can't you?" approach, and it's an



Commercial bulletin boards such as CiX often have useful Internet 'gateways'

fingertips

Yellow pages



For a quick introduction to some of the best sites available, and a note on what they contain, you should buy one of the Internet magazines now on the news stands. These can be a bit pretentious, but they offer the best information presently available. There are commercially available Internet directories (try Computer Manuals on 021-706 6000 for details), but these usually reproduce information which is available on-line

To save a bit of cash, there are plenty of places on the Internet where guides and directories may be found. Try the docs on offer in your Internet service provider's 'pub' directory, or connect to the following sites and download Perry Rover's anonymous FTP site list:

Site: garbo.uwasa.fi
File: /pc/doc-net/ftp-list.zip

Site: oak.oakland.edu
File: /SimTel/msdos/info/ftp-list.zip

Site: ftp.edu.tw
File: /documents/networking/guides/ftp-list/sitelist

The site list is huge, and will take a long time to download, but it contains just about every site in the world where 'anonymous FTP' is available. See the FTP panel on the following page for an explanation on how this works.

approach that can cost the earth.

The first task for a new user is to find and download the software required to connect properly. Internet runs on Unix systems, which means you can't just use N-Comm or Term. You will need TCP (Transfer Control Protocol) software. Not all of the service providers are set up to cater for Amiga users, but for now we'll use Demon Internet Services (DIS) as an example.

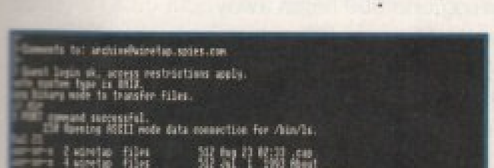
A nice easy DIS setup archive can either be downloaded or ordered on disk (at a hefty £7.50), and once the user has completed a simple installation routine, the complex behind-the-scenes AmiTCP setup is carried out without hassle. Demon uses the Serial Line Internet Protocol (SLIP) system, and SLIP drivers are automatically installed to allow the Amiga to talk to the Internet.

Once this has been set up, all other mail readers, news readers, and the new Mosaic World Wide Web browsers will run on top of AmiTCP using the SLIP connection. If this sounds complicated, try not to worry about it because if you have the proper archive, installation is mostly automatic. Questions will be asked about your node name and IP address (a unique number which identifies your node), but these are provided when you set up your account and dial in for the first time.

SUPPORT

There's plenty of help available via on-line documentation and the docs supplied with most software, but whichever service provider you choose to go with, most have helpful technical support lines for new users. ➤

> Most new users start to whizz around all over the place, browsing through the directories on those sites they have addresses for, but the sensible way to do things is to stick with your own service provider to start with.



Connecting to the US-based wiretap.spies.com using the London-based CiX

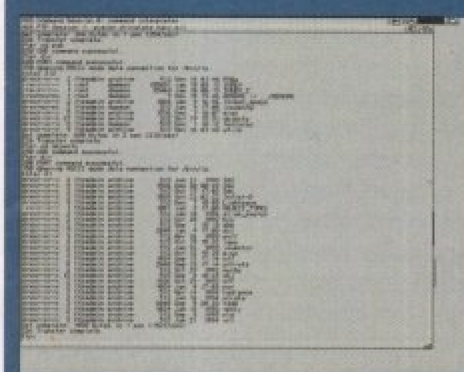


The TIN news reader supplied with Demon's installer software is basic, but adequate

Some snazzy sites

Amiga owners who think the Amiga world is shrinking a little will be surprised to find that there are thousands of Amiga users on Internet and hundreds of sites where Amiga-specific software can be found. Though Internet is not the best place to go for shareware programs (traditional bulletin boards such as 01 for Amiga or shareware libraries have a lot more and it's cheaper), you can find plenty of it, and there are plenty of sites in the US and elsewhere with dedicated Amiga directories.

One good example is 'avalon.chinalake.navy.mil', an American site where the Avalon CD-ROM recently featured in *Amiga Computing* gets a lot of its LightWave and other 3D models. From this site, you can download models, maps, or complete scenes for



There are dozens of object types available in their own drawers at the Avalon site

LightWave, and there are utilities for other 3D graphics use.

A hilariously funny site is 'wiretap.spies.com', another US site and another one offering anonymous FTP. Try the Library/Fringe/ directory and you'll see sub-directories for everything from lewd jokes to UFOs and government conspiracy theories. There are some side-splitting documents from nutters claiming that the US government is in league with a sinister race of aliens, plus some gruesome tales from those who claim to have been abducted by the 'Greys'.

Without a doubt, the best UK site is the Imperial College database, which is huge and contains dozens of Amiga sub-directories. For a quick look, try FTPing to the address:

```
ftp.doc.ic.ac.uk
```

and check out the pub/packages/amiga directory. There's everything from games to Amos, comms, and general Workbench software here, and more is added all the time.

Again, there are so many sites that your best bet is to buy a monthly Internet magazine. These carry evaluations of various sites, which means someone else has paid the phone bill to find out how good or bad they are.

Electronic mail

This is potentially one of the most complex areas of the Internet, but at its most basic level it should also be the easiest to grasp. Using an off-line mail program such as Elm (one will always be provided by your home site with the installation software), you can type huge letters or documents while disconnected, tell the program who it is to be mailed to, then log on and kick the mail into action.

The actual sending is usually automatic. So long as the message is created and saved in the default mail spooling directory (set up when you install your software), the message can be posted in seconds and will be passed from site to site until it reaches its destination. The savings over ordinary post or phone calls are dramatic, particularly if you send long, detailed messages.

When you log on the mailer program can also be used to download any messages you have received since your last session. When you do receive a message, the sender's e-mail address will be attached, and you can reply, using your mail program, by hitting the 'reply' key while reading the message – so you don't even have to type the other person's address.

A quick note on addresses: they look complicated, but they aren't! To take the *Amiga Computing* address as an example, it looks like this:

```
amigacomputing@cix.compulink.co.uk
```

The first part is the name we use while on-line, followed by a commercial 'a' signifying 'at', then the name of our service provider, in this case the CiX Compulink bulletin board, followed by 'co' to tell us it's a commercial company, then 'uk' for the country.

Though strange-looking to the new users, these e-mail addresses are actually simpler than the usual postal addresses, and it won't be long before most company and personal stationary carries an e-mail address as well as the usual street, town, and postcode.

Right, that's the simple stuff out of the way. What next?

Internet, as we already know, consists of thousands of computers and local networks across the world, and each has its own address. Imagine there was someone in Europe who had information you needed for a research project, but you didn't know the person's address. It would cost a fortune to try the various places you might find this person, and that's what wandering around Internet can be like.

Without a list of 'sites' you will end up looking at a flashing prompt, scratching your head while the phone bill assumes Public Sector Borrowing Requirement dimensions. Most new users start to whizz around all over the place, browsing through the directories on those sites they have addresses for, but the sensible way to do things is to stick with your own service provider to start with.

DIRECTORIES

Every service provider such as Demon will have a public directory (normally just called 'pub') and there will usually be a 'docs' sub-directory containing huge amounts of useful information. The first thing to do, then, is download all the help, FAQ (frequently asked questions), and support files you can get your hands on.

Again, there will usually be a list of UK sites, and there are site lists and directories available which have been compiled by helpful experienced Internet users. Get your hands on one of these (see Yellow Pages panel), and read *everything* before going on-line and starting to explore. Without such a map your exploration will be fun, but ultimately costly and unproductive.

Unfortunately for UK users, the Internet hasn't yet seen quite as big a boom over here as it has in the US, and the majority of good sites in Britain are still to be found in universities – but this doesn't mean you have to settle for taking up biochemistry. Phoning a site in any other part of the world costs no more than the price of your call to your service provider, and that's the real beauty of the system. By telling your Amiga you want to talk to an address such as 'wiretap.spies.com', you can be connected within seconds at a local phone call rate, despite the fact that this site is actually in America.

Your service provider's machine makes the link and off you go. It is this connectivity that you pay for when you subscribe to one of the commercial Internet providers.

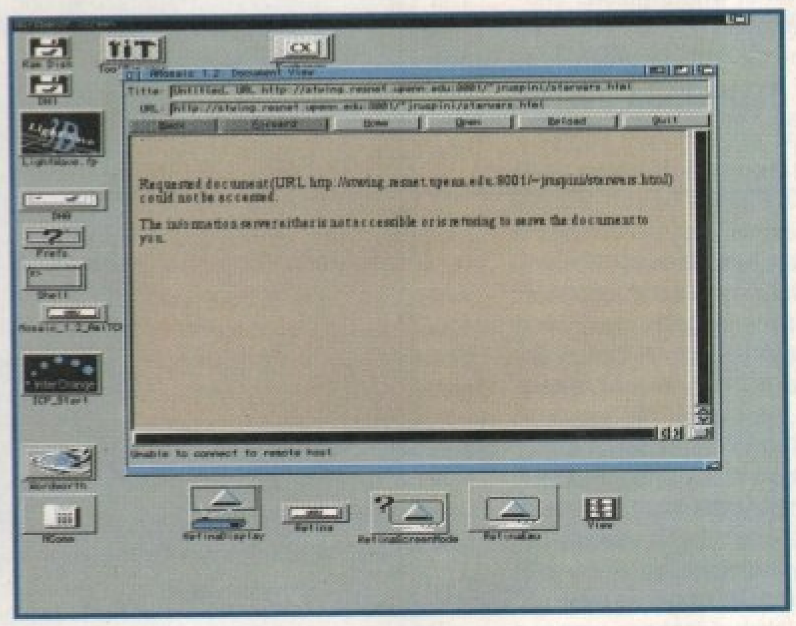
What this means is that the speed of your modem can sometimes be less important than the quality of the lines leading from your service provider to the wider world. Some remote sites are very slow, others very fast, and you can wait for long, agonising minutes while a Finnish or Japanese system decides to do what you tell it to do.

On the other hand, the facility to plug into the University of Indiana, download a few files, then check with Copenhagen and maybe upload a couple (it helps if you're prepared to make it a two-way street), is unique to Internet and one you'll quickly become hooked on.

GET CONNECTED

We have tried in only a few pages to cover something of the scope of the Internet, and shown you a few places you might start, but as it would take a 300-page book to do the subject justice, it stands to reason that there's a lot more out there than we've had space to cover. The only way to find it is to get connected and join in.

You can pay your own phone bill, though. Don't come running to me.



Just about the only graphical web browser available on the Amiga, Mosaic is still having teething toubles

How much does it cost?

The biggest investment in the Internet is your Amiga, a hard drive and a modem. If you have already splashed the cash for the hardware, all you need is a phone and about a tenner a month. Just choose from one of the many companies offering Internet connection to UK users and start exploring.

To decide which service to go with, you need to ask yourself what you will be doing with your account. If all you require is e-mail and connection to the thousands of news groups around, you won't be spending much time on-line, but if you're into the Multi User Dungeon (MUD) scene, you'll need a lot of cheap live time.

Some services offer a straight monthly subs fee and no on-line charges, some offer cheaper subs but start to charge extra after the first few hours. In addition, you might find that you can dial in from a cable phone link if you have cable TV in your area, and there are enough sites that ordinary BT users (most of us) can often find a PoP in their local area which can be accessed at local rates.

If you live outside the major cities, don't be scared of a phone call to a PoP at the other end of the country. These days it costs the same to make a trunk call no matter where you are in Britain (old fogies note that there's no more button A, button B), so if you phone out of your area to a modem 50 miles away it costs the same as phoning one 500 miles away.

Subscribing to Mercury (£3 per quarter – save up to 25 per cent) or one of the other long-distance services can also represent a big saving, but the best advice is still to phone outside peak times or at the weekend. Here's a short list of some of the biggest UK providers to give you an idea how much they currently charge. Remember: The Internet is moving so fast that you should always check with the companies themselves for the latest information.

Almac

Subs: £45 per year for e-mail and Usenet or £7.99 per month for all services
On-line: No on-line charges
Services: FTP, Telnet, e-mail, Usenet, Gopher, MUD,

Anonymous FTP

File Transfer Protocol, or FTP, is the most common method of downloading and uploading files on the Internet. Where a site has a public area open to anyone, the process is known as 'anonymous FTP' and enables the user to download files without registering with the sysop or using a special password.

Your Internet software will usually have FTP capability, but the Amiga doesn't have as many graphical front-end programs as the PC at the moment. The result is that you'll have to type the commands in for yourself.

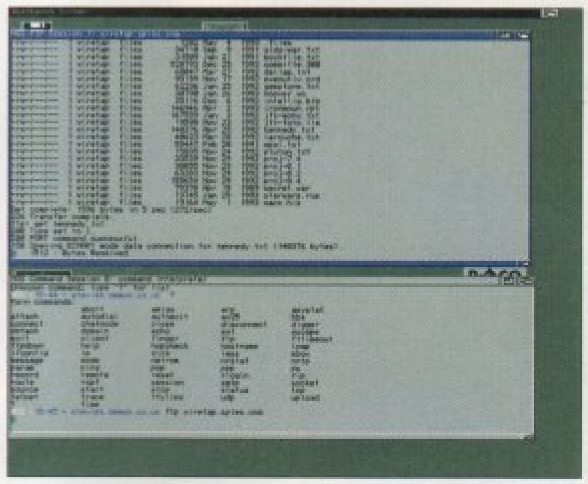
To do this, first connect to your Internet service provider, wait until you have been logged on, then FTP to the site of your choice (Perry Rover's site list is a good place to start). This will sometimes be the name of the site with 'ftp.' added to the beginning, sometimes just the site name itself, but the format is always something like:

```
ftp ftp.demon.co.uk
ftp www.cybercafe.org
```

You will see a message like 'resolving www.cybercafe.org' followed by 'connecting to 123.456.78.90 port 21' depending on the site's IP address, then you will be asked to type a user ID. This is often just the word 'anonymous' (hence the name anonymous ftp), sometimes 'ftp' or 'user' (try them in that order), and you will then be asked for a password. Type your full e-mail address as given by your service provider and you will usually be connected directly to the 'pub' directory.

From here you can use the fairly simple FTP commands, such as DIR, CD, CDUP, and GET (for downloading), and each FTP server will have on-line help for each command. You can usually type 'help' followed by the command, or just enter a question mark for a list of the commands available.

From here on in it's up to you to find and download the files of your choice, but a good tip once you find a directory containing files you are interested in is to download just the .index or .files text file and go through this at your leisure while off-line.



Manual FTP is a chore, but it's a lot better than no FTP at all

News by any other name

The misnamed Internet 'newsgroups' are where most of the on-line activity takes place as far as individual users are concerned, and you can have a real giggle taking part in them. If your service provider has a Usenet or news feed, then the masses of messages added to these groups every day will be downloaded to your home site, and you can choose which groups to take news from.

Be advised that even with a fast modem, it can take almost a full day to download all the newsgroups, so you'll have to be very selective! Many of them are for the scientists and academics who once dominated the Internet, but there are hundreds of groups on subjects ranging from cannabis to sexual fetishes and Monty Python (the latter of which seems to combine the first two!).

When you subscribe to a news group (which is free), your Internet software will usually start to download new messages automatically when you log on, though you can choose to manually 'kick' the news when you want. Once downloaded, you can view the messages off-line using a news reader, and add your own messages, comment on others, and so on. Saving your input to disk, your news program then uploads it next time you log on and everyone else gets to read your comments.

You can find yourself locked in argument or discussion with people from across the globe, or swapping recipes with Australians and Peruvians in no time, and this is probably the most enjoyable, inexpensive use for Internet. You will have to abide by the rules, though, and if you break them by becoming offensive, insulting, or merely irrelevant (irrelevant messages cost as much phone time to download as others), you will incur the wrath of everyone on the news group.

Such 'flaming' attacks can be juvenile, elitist garbage from real old-fashioned comms anoraks who don't like 'Newbies' (as new users are sometimes insultingly called) butting in on their territory, but if you started mouthing off and swearing in the pub, you would receive something a lot more physical. Stick to the point, try not to act in a civilised fashion and you should be alright.

The biggest temptation on Internet, whether using e-mail or a news group (which is just a public extension of e-mail), is the anonymous nature of a keyboard. You can't hear or see the people you're talking to, but they *are* real, they do have feelings, and you should treat them the same as if you were talking to them in person. Hate mail hurts, folks, so be nice to each other.

Save the language!

If the English language was ever threatened by computers, the ridiculous acronyms used by Internet users are a prime murder suspect. E-mail messages packed with cryptic nonsense such as BTW (By The Way), IMHO (In My Honest/Humble Opinion) and so on are a throwback to the very early days when there were no off-line mail programs and users were forced to type messages while the phone bill mounted.

Obsolete for years, these acronyms are still widely used, despite the fact that e-mail is almost always created before logging on when there's plenty of time to make use of the world's most expressive language. Thousands of sad comms anoraks still cling to them, however, as the language of an exclusive furry collar club, and the new Internet user can often feel obliged to follow suit.

Please resist the temptation! There are so many acronyms nowadays that you can actually find 'dictionaries' of this weird new language which has been called everything from 'cyberese' to 'interese'. Receiving a message full of the damn things conjures up a particular image of the sender: 17-years old, spotty, sad, and desperately in need of a life. You have been warned.

World Wide Web (WWW) and others
Phone: 01324 666336
PoPs: Falkirk

Demon Internet Ltd

Subs: £12.50 plus VAT registration, £10 plus VAT per month
On-line: No on-line charges
Services: FTP, full mail and news feeds, WWW, Telnet, Gopher, and others. Also has a 384k leased line to the Imperial College site
Phone: 0181 349 0063
PoPs: London, Birmingham, Sheffield, Manchester, Leeds, Hull and others. Phone for details as more PoPs are being beta-tested as we go to press

Pipex

Subs: £180 per year basic (variety of services - phone for details)
On-line: No on-line charges
Services: Mail and news feed, FTP, WWW, Gopher, Telnet, and others
Phone: 01233 250120
PoPs: London, Birmingham, Manchester, Edinburgh, Bristol, Cambridge

The Direct Connection

Subs: £10 per month
On-line: No on-line charges
Services: FTP, WWW, Telnet, Gopher, FAX service, Usenet and e-mail feeds, plus others
Phone: 0181 317 0100

GreenNet

Subs: £5 per month
On-line: £3.60 per hour peak, £2.40 per hour at other times
Services: FTP, FAX service, Telnet, Usenet and e-mail feeds, Gopher, plus others
Phone: 0171 713 1941

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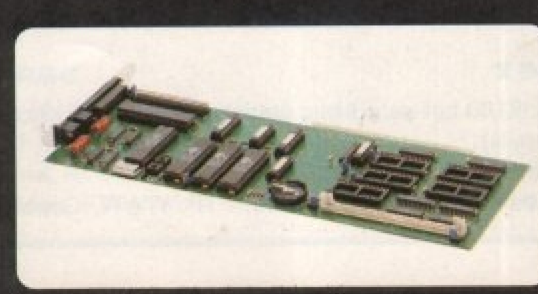
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E586DX SM MODULE	For all versions	£ 99.95

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Visa/Mastercard accepted (2.5% Surcharge). E&OE.



Imagine that



The Stingray car boasts smooth and realistic shading, with the doors and wheels movable for animation purposes

With lightwave constantly stealing the limelight, a German graphics collection CD appears that reminds us all why Imagine still has thunder in its raytraced results

Imagine, along with Real 3D, were the former kings of Amiga 3D art. Indeed, the general consensus still swings in favour of Imagine when it comes to stills. But Lightwave moved in with its all-singing, all-dancing options, features and staggering end results and has become the number one for the best animation.

Since then, and certainly in this magazine as well, the likes of Imagine tend to be passed over when new software and hardware for users of Lightwave appears. When the Enhancer CD landed in my sweaty palms at the recent World of Amiga show, the images on the back cover sent a revitalising reminder of Imagine's excellence when crafted in the right hands.

The silver disc contains objects, moving textures, bitmaps and 3D fonts that can be used by anyone prepared to cough up the readies. After witnessing some truly disappointing 3D objects on a Lightwave package the day before, the craftmanship of the Enhancer collection was exceedingly impressive.

At the moment the instructions provided are in German, but anyone with experience of using the Amiga in conjunction with Imagine shouldn't have too much problem picking up what needs to be done to load the objects into the program. There are eight 'sections' to the disc in all – Objects, Attributes, 3D Fonts, Reflection maps, Backdrops, Demos and a Gallery to wander around to get a better idea of what your end results could look like.

SELECTIONS

A small selection of the 12 3D items consist of various forms of transport – from a Benetton racing car and stock car to a pick-up truck, and even a time machine as seen in the film version of HG Wells' classic novel. The attention to detail is first rate, with each component movable, for example, wheels and doors.

The majority of objects, though, are made up of 100 household items ranging from lampshades and video recorders to sofas and cabinets. Like, the vehicles, it's possible to manoeuvre parts of the main object to your customised design. For instance on a cabinet, doors can be taken out or opened for that finishing touch.

Glancing through a majority of the 100 items, it's clear that the designers have spent time and effort getting the right look with the right proportions, even on something as simple as a desk lamp. This kind of graphics collection can only enhance your creativity using Imagine.

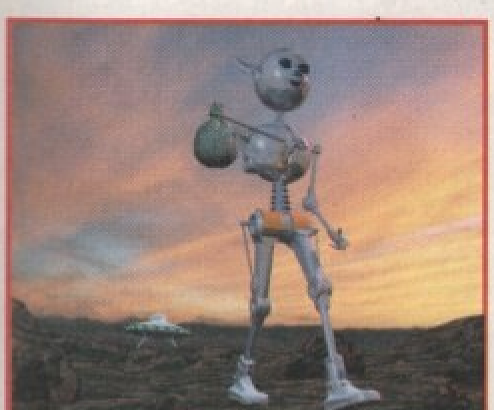
The Attributes section provides the user with over 100 textured surfaces to play around with. Simply de-archive the file with the program included on the CD and lay a wide range of differing maps onto any object you want. Glass, plastic, crystal and more are available.

For those interested in corporate logo design or titles, there are 24 different fonts at your fingertips where each letter is treated as a 3D object – individual or grouped letters can be animated, stretched and rotated to your heart's content. Couple this with the rather useful reflection maps and flying metallic-like logos are made more simple to achieve.

There are also a series of backdrops to drop in which mainly consist of cloudscapes with mountain ranges and other epic views.



A Harley Davidson motorbike – just one of the quality images available to animators and 3D artists. Excellent texture use and shading produces some first rate results



Using one of the backdrops, this picture can be found in the gallery section which shows off some of the work already produced by artists



With over 100 items of furniture to arrange, there's plenty of scope for interior design, set building and just plain experimentation

Back where it belongs

It has to be said that the Enhancer CD is a classy product that can only do Imagine good. There were a few problems running the disk on version 3.1 when rendering a vehicle, and the computer needed to be told exactly where to find a particular brush via the attributes menu. Annoying but solvable all the same.

If you have Imagine and it's gathering dust in software-cupboard obscurity while Lightwave impresses your friends, colleagues and George Lucas, Enhancer is sure to raise a few eyebrows and put Imagine back on the map as the number one 3D stills' creator. Highly recommended but could do with a price drop of £15-20.

Looking in the gallery, which has been provided to show Imagine's real power at generating still images, these backdrops look very effective with photo-realistic graphics.

Finally, 50 frames of animation maps have been included to help create gleaming or glittering on an object when in movement. These 50 frames can be changed to suit a particular scene's needs.

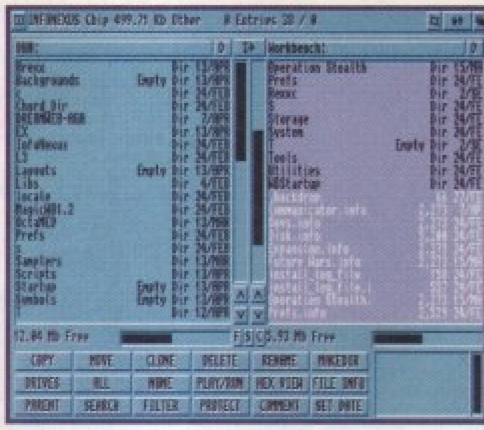
The bottom line

Product: Enhancer CD
Supplier: Gordon Harwoods
Price: £49.95
Tel: 01773 836781

Ease of use	**8**
Implementation	**9**
Value for money	**7**
Overall	**8**

Filing at your fingertips

Someone has had the nerve to take on Directory Opus – Optonica have unveiled their new file manager, InfoNexus. Adam Phillips reviews



The main hub of InfoNexus – there are a multitude of options that can be carried out to manage your files



The pop'n'roll menu is a nice idea and offers several powerful functions, especially in the networking department

Like most things in life, you don't realise how you possibly coped without a file manager before once you've had one up and running. The likes of Directory Opus have been setting the standard for a while now, equalling their PC equivalents admirably.

Like all healthy marketplaces, there's always the opportunity for a young upstart to push its way to the top of a buyer's list. Optonica are obviously one company hoping to do just that with InfoNexus, claiming that it is easier to use, takes less configuring and is more powerful than the flagship Directory Opus.

Like all file managers, the main bulk of the screen in InfoNexus is taken up by two windows, each one being able to show any drive's contents that your machine may have. Running along the bottom of the interface are a series of buttons, some of which regular users of Directory Opus will be familiar with. Copy, move, clone, filter, rename and make dir, among others, are instantly accessible.

New for InfoNexus are the special pop and roll menus. Accessed by pressing and holding the right-hand mouse button down, a strip of menus appear wherever your mouse pointer is on the screen. There are six to choose from in all – Project, Prefs, Files, Media, Functions and Network. The Network feature is highly useful and, unlike Directory Opus, comes fully configured for multiple users. It offers direct support for Envoy networks which require a little configuring to get up and running when accessing through Directory Opus – with InfoNexus, it's immediately accessible.

ACCESSING

Other machine hard drives can be accessed, mail can be sent back and forth, mail directories created and an option is available to grab whatever is on the other machine's screen at the time.

InfoNexus's main strength though are its graphics display and sound capabilities. The package comes provided with its own view program that can show many of the picture formats I pumped through it. Again, Directory Opus has to be configured to hunt out the relevant viewer program for the likes of 24-bit images, and then use it to display the image.

In other words, InfoNexus has a very basic AdPro-like facility that can display Jpegs, Ham8s, PC BMP files, 24-bit images and others, in either full screen or in a small, centralised window. I wasn't always convinced by some of the images I got back from the program – when comparing them in AdPro using the same screen set-ups, InfoNexus's image quality on a PC BMP is not of a higher standard and there was evidence of dithering distortion.

There was also a problem encountered when a standard HAM animation file was played back – a distorted image appeared in the centre of the screen and the animation played on the left-hand side. Hopefully, these problems will be rectified in future upgrades. Optonica take note.

STOREROOM

Another of InfoNexus' strong points is its ability to store previously visited directories and files in a cache, so accessing any favourite and constantly-in-use directories is very quick.

The program's main problem though is its speed. InfoNexus, even running on an 4000/040, is not as quick as you'd expect it to be when compared to the likes of Directory Opus. Functions such as copying one file across to another directory can take an age when compared with its nearest rival

The user interface, while being nicely laid with its pop'n'roll menus, is more clumsy than the Directory Opus approach. The Opus purists in the office grumbled that they weren't that keen on the layout. I reckon I could get used to it quite easily, even if I would prefer having the drives up and already displayed for instant access without having to click to a sub-menu as you do in InfoNexus.

While it has its own special functions that are highly useful, and the lack of needing to configure unless you want to define your own special hot keys makes InfoNexus an ideal tool for beginners, one can't help but feel the package lacks the sheer power and versatility of Directory Opus, which albeit does require some reconfiguring.

InfoNexus is a cheaper piece of kit by some £20 though, so if you're a first-time user with just a little cash or a computer artist or musician, then Optonica's user-friendly, if flawed, package will be very suitable indeed.

A slight whinge

One of the most annoying omissions from both programs is the lack of automatic detection between a DOS and an Amiga disk. Instead of pushing in the disk and the program detecting the difference and adjusting accordingly, the user has to select the right format for himself.

It might sound like an unnecessary and downright lazy option but when you're handling a large number of differently formatted disks, it would come in handy. I'm glad I got that off my chest.

The bottom line

Product: InfoNexus
Price: £29.95 inc VAT and P&P
Supplier: Optonica
Tel: 0445 558282

Ease of use	**8**
Implementation	**7**
Value for money	**9**
Overall	**8**

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68040 25MHz - For Upgrading A4000-LC040	£ 165
68030 25MHz with MMU (PGA Style)	£ 59
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68030 50MHz with MMU (PGA Style)	£ 109

VIDEO PRODUCTS

BROADCASTER ELITE

Previous Version known as Digital BroadCaster 32

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Typical System : (Approx £11,500 inc. VAT)

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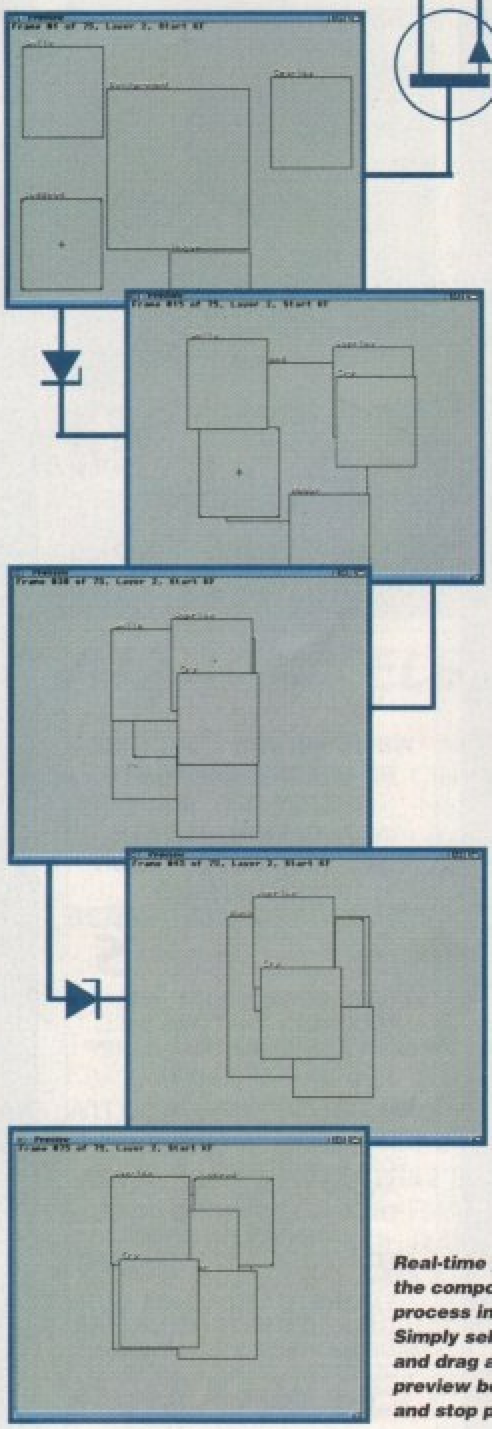
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Classic composition



A complex composition with alpha channel crossfades, chroma and luma keying. The whole thing taking less than five minutes to design and generate



Real-time previews of the compositing process in action. Simply select a layer and drag and drop its preview box in the start and stop positions

Probably one of the biggest ironies of Amiga graphics is that much of its creative potential has traditionally been shrouded in a vial of complexity, which for the majority of users left many of the best creative opportunities just out of reach.

A classic example of this peculiar situation is the ARexx dependency of the giants of Amiga image processing, namely ADPro and ImageFX. Even though both systems offer huge potential for videographers and animators alike, actually exploiting their respective assets traditionally involved an in-depth understanding of ARexx.

Unfortunately, artistic talent and programming skill rarely go hand in hand. As result, the potential of both systems has rarely been in the hands of those who've needed it most.

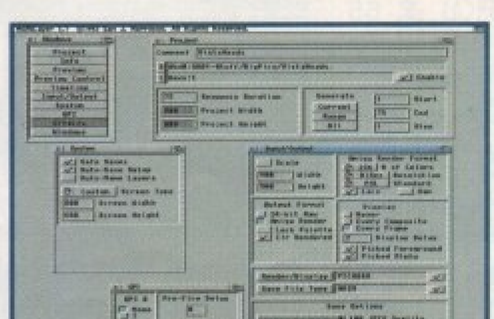
It's true that products like ProControl and Multiframe do offer a point and click approach to certain batch processing problems.

However, neither offer a complete solution to the problem of generating the digital video effects or DVEs that both programs are obviously capable of. Fortunately, Prime Software have now added a third piece to the IP jigsaw with the launch of MultiLayer. Unlike its counterparts, it doesn't simply automate the process of format conversion or special effects, but rather concentrates on the effortless production of DVEs.

After the ubiquitous Commodore installation, initial loading reveals a daunting interface consisting of an endless array of requesters. However, after a quick excursion through the tutorial the fog soon clears to reveal what is in fact an exceptionally well though out and friendly interface.

COMPOSITOR

Okay, what lurks beneath this sea of controls and windows? In short, the ultimate digital compositor. In its present form the software doesn't accommodate the myriad of operators and hooks within both ImageFX and ADPro, a factor which obviously negates the use of tumbling perspectives, twirls, rotations and so on. For many this will mean that



Although there's a fair selection of assorted requesters, this basic selection are all you need for most edit decisions

MultiLayer, like its counterparts, still falls short of the all in one DVE system they've been dreaming of. However, even with the present limitations ML is still in a league of its own when it comes to automated composition and layering of animated images.

I must admit the lack of a support for the various FX is a slight let down, but it's still early days for a program which already boasts a ghosted effects option in the pull-downs.

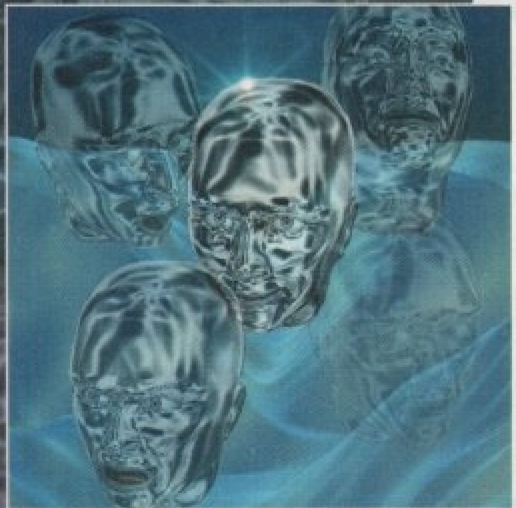
Obviously, the plan is to follow up this initial release with updates which will add this finaly and all important element to the equation. As a result, any would be investor should waste no time in returning the enclosed registration card.

It all sounds very clever, but what does it actually do, and why? MultiLayer is the first IP add-on which allows point and click creation of animated multi-layered compositions using either single frame or animated image sequences.

In fact, the software will happily composite as many as 99 images or image sequences – either 24-bit or otherwise – into a single frame, which can then be saved in any format either ImageFX or ADPro supports.

In addition to simple layered composition, each of the 99 images' layers can be made to glide across the screen from a user-defined A to B position – using either linear motion or a combination of ease-in and ease-out.

Add to that user defined enveloped transparency control and the iceberg of possibilities slowly begins to rise up from the depths.



A classic example of MultiLayer in action as megabytes of 24-bit data flys and fades effortlessly

Paul Austin explores the image processing add-on the world's been waiting for

Every time you select a new layer all the requesters instantly update with the info for that particular layer. As a result, controlling gigabytes of imagery is simplicity itself.

Basically, the entire system revolves around a timeline which lists all the frames to be processed. Beneath each frame a small icon denotes which layers are active in that particular frame. In addition, a preview screen also shows the active layers and it's from here you can define the animation – if any – for each layer.

CONTROLS

Accompanying the preview is a small control screen which provides basic VCR controls for playback and testing, plus assorted options to help set up the animation for each layer. Again, simply selecting a particular layer in the timeline activates the related rectangle on the preview screen, ready for drag and drop editing.

The actual layers also enjoy yet more editing options back in the timeline requester. As the name suggests, layers literally lie one on top of the next. However, with the aid of the assorted cut, paste and copy options you can move any layer back and forth along the line – thereby introducing it earlier or later in the overall production.

You can also move a particular image up or down the stack, copy or swap it to another layer, or remove it entirely. In short, complete control over where, when and how any layer will appear.

The real beauty of the system is that although you may be working with massive amounts of data, the program and its accompanying IP package only ever needs enough memory to load and compose the largest single layer you've specified – as each frame is composed and saved one step at a time.

AMIGA BLUE CHIP AWARD

Of course it could be argued that simply flying dozens of 24-bit rectangles around the screen – although impressive – does lack a little subtlety. As a result, the designers have also added built-in Luma, chroma, chroma range, 0-Black keying options.

However, the really classic touch is the inclusion of truly spectacular alpha channel support. As mentioned earlier, each of the 99 image layers can hold either a single frame or a sequence. The same is also true for alpha images.

Better still, you can even mix alpha and image formats. For example, you could have static images with an animated alpha. End result – the most amazing wipes and fades imaginable. Alternatively, you could use an alpha to smoothly rotoscope live or rendered footage over another image or sequence.

With the huge number of images and control options, keeping everything in hand would seem a nightmare. However, that's not the case. Although there's a profusion of requesters required for each layer, the designers have done an excellent job of simplifying the control process.

AC

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

2.04 Workbench
1 Mb RAM
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ADPro or ImageFX – dedicated version for eachprogram

The bottom line

Product: MultiLayer
Supplier: Premier Vision
Price: £99.95
Tel: 0171 721 7050

Ease of use	10
Implementation	10
Value for money	8
Overall	9

Keytype compendium

For those who may be a little hazy on the finer points of the assorted keying options, here's a brief rundown of the affect each keying format has on the compositing process.

None – Not surprisingly this option simply adds the new layer as is, the end result being a simple rectangular static or fly-by either with or without a straightforward transparency fade.

Alpha – Basically, an alpha image is a 256 greyscale which affects the transparency of its accompanying layer based on the relative brightness of the image. An entirely white area would be completely opaque while darker regions would become increasing transparent.

In short the most versatile, subtly and powerful keying option on offer. Rather than simply doing a direct replacement of a particular colour or range, an alpha provides a flexible transparency filter which can of course can be animated to generate a super smooth key over the image.

Better still, there's no restriction of the size or format of the images you use for alpha channelling. If any adjustments or conversions are required it's all done automatically.

Luma – Provides an easy, if less accurate form of alpha channelling. Essentially, the software generates its own alpha image based upon the brightness of the image in that particular layer. Perfectly acceptable if, for example, you wanted to key some live footage that had been shot over a backdrop.

Chroma – In short, the ultimate genlock. Like its analog hardware generated counterpart, chroma simply takes the colour you've selected and makes it totally transparent.

To assist the process a small requester is enabled to allow the selection of the precise RGB colour you require. Obviously this differs from traditional analog chroma keying/genlocking in that you're generating a truly digital key which provides the ultimate in keying accuracy.

Chroma range – Not surprisingly this is almost identical to the basic chroma, the only difference being that you're provided with additional RGB selectors with which to specify a range or band of colours, rather than an individual.

0-Black – This one's been thrown in for added convenience. It simply keys out colour zero from the selected layer. Quite handy if you've rendered an image or sequence on black and need a quick way to key the image onto a backdrop without fiddling with the RGB settings in the chroma option.

Verdict

As you've probably already gathered, I'm very impressed. MultiLayer is one of the few truly unique pieces of software on the market. And what makes it even more unique is its ability to inspire. Most programs offer a solution to a particular problem, however in MultiLayer's case the more you think about and use the package the more applications spring to mind. Obviously the program's existing limitations with regard to IP operators and hooks which generate special effects is mildly disappointing. However, this should be at least partially put right with the next update.

On a practical level, my only complaint is the strictly linear approach to layer animation. It would be nice if you could generate complex motion paths more easily, although with a little thought, combined with the various cut, copy and paste, you can at least simulate more complex movement. Leaving these rather nit-picking points aside, MultiLayer is nothing short of an IP masterpiece. If you've already got a copy of Image or ADPro it's an essential investment.

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Paul Austin provides a guided tour of the latest videographic CD-special from the States

Moving pictures



A pretty impressive flame sequence, but nothing really to challenge the Pyromania CD

It seems there's no end to the explosion of serious CDs for the Amiga. Although formerly the preserve of the PC, the growing hoard of Amiga-specific CDs is quite literally changing the way many enthusiasts are using the machines.

Now the backdrop brigade have taken the logical step and ventured into the world of animation. At the forefront of this new wave was a Pyromania CD from VCE inc. This product brought Hollywood-quality pyrotechnics to the desktop with a collection of explosions and fire sequences which literally took the serious animation world by storm.

Following in the footsteps of this revolutionary release comes the Moving Textures 100. As part of the collection you receive 22 ready-to-use texture sequences for use in 2D or 3D productions.

Unlike the Pyromania collection, the MT 100 series has already been rendered as 256 colour IFF images. However, this may not be great news for the purists who are more at home with a true 24-bit image.

It must be said though, that the overall quality of all the sequences remains impressive. Obviously this rendering down to 256 has one major advantage, namely a massive reduction in storage space.

As a consequence, each of the sequences boasts either 300, 600 or a massive 900 frames – easily enough for even the most extravagant animation – and remember, there are no less than 22 sequences on the CD, split into two categories.

Within the Tru Maps drawer you're provided with two versions of a time-lapse cloud animation, crackling fire, smooth burning flames, crisp ocean water, bubbling stream and slow moving smoke.

In the second directory, entitled FX Maps, awaits boiling, burst, calm, disturb, jiggle, liquid, pour, rough, spots, swift, tide, and finally, four water variants.

All this sounds just a little bit too good to be true, doesn't it. Well unfortunately it is – at least when it comes to the size of the images on offer.

Although rendering down to 256 may be a compromise that many videographers will be willing to accept, I'm not sure the manufacturer's choice of available resolutions will do the product too many favours.

In what appears to be a drastic attempt to maximise storage space, the sequences have been scaled down dramatically, with the worst examples being the FX Maps collection, all of which have been reduced to a minuscule 192 x 120. Fortunately, the Tru Maps range fairs a little better with a standard image size of 320 x 200.

SCALING

Obviously, not all video graphic productions require full-screen image maps, but having said that, I feel scaling down to just 192 x 120 is taking things a little too far.

Although the manual and accompanying bumph claim that the collection is aimed at both 2D and 3D animators, it's pretty obvious from both resolutions and subject matter that the target audience is primarily the modelling community.

Although the resolutions make the collection less useful for 2D and multimedia work, it's not quite as big a problem for 3D applications.

Fortunately, most 3D packages offer some form of anti-aliasing and a means of minimising pixelisation either as standard or as an option. Add to that the ability to tile images and you have a great deal more flexibility than traditional 2D animation.

This leaning towards 3D is made even more pronounced by the inclusion of a small printed sheet which details how to employ the textures within Lightwave, Imagine3.0, Aladdin4D and Real 3D.



Another impressive sequence, but the small scale could still put many people off

Verdict

The image quality of all the textures on offer is very impressive. In fact, even when the images are doubled in size the quality remains quite acceptable.

However, I'm sure the question of resolution will put many a pro animator off a CD which in every other respect is a useful weapon in the growing armoury of 3D add-ons.

Personally I'd much rather the collection offered fewer image sequences in better resolutions, or better still, the same number of sequences with fewer frames per sequence.

Remember, the smallest sequence in the collection offers 300 frames of animation, which if used in its entirety would generate a full 12 seconds of animation.

In my experience this would be more than enough for most effects. After all, how often have you rendered a 24 or 36 second – 600 or 900 frame – animation which uses a single camera angle throughout. Why not make all the sequences 300 or 400 frames long with a minimum resolution of 320 x 200?

Moving Textures 100 isn't without its faults, but it must be said the images themselves aren't one of them. As a result I'll leave the buying decision in your safe hands. All in all, a good product which, with a little more thought, could have been great.

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A fair few complaints

star letter

I own an A500 running Workbench 1.2 and with 3Mb of RAM. Your CoverDisks are gradually containing less and less software that I can use. In the last six months, the only programs of any use to me were CanDo2 and DMSWorkBench.

A few others work but are of no use to me, and some will work after I have made a few alterations (using ReSource and DevPac3). If, as you claim, your lack of support for out-of-date machines is due to a lack of available software, then how come *Amiga Shopper* can give me a CoverDisk each month packed full of PD/Shareware, almost all of which works?

Admittedly, I do not get any commercial software from them, but, in my experience, PD/Shareware utilities are often much more useful than commercial products anyway because once you have a decent set of programming tools (e.g. DevPac, Resource), a spreadsheet, a word-processor, a database and an art package, there is very little commercial software of any use to you.

The new design of your magazine is a disaster. Far from the praise Denny Atkin gives your art editor (ESP, Jan '95), I would be very much inclined to sack him.

Surely the aim of any font is to be read easily, and the font you now use for headings is not easy to read. Neither does it look good. The word Amiga on the front of the magazine used to be the same on every Amiga magazine in the shops.

You're the only magazine to have changed it to an out-of-date one, and I don't know why you did it. The logo on all the other magazines and your old one is an almost exact copy of the word on my computer.

Your new logo certainly makes your magazine stand out from the rest – but not in the way it should. I say it should because the content of the magazine itself is actually better than any other magazine.

If you want to be sure of getting my subscription renewed next time it runs out, I suggest you scrap the new layout, have more on programming and less on graphics, and put more useful utilities on the CoverDisk.

If you do this then your magazine will be perfect, and my subscription to *Amiga Shopper* will not be renewed.

Having said that, CanDo2 has already proved to be useful as have your articles about Amiga repairs – I had two damaged mice, and after about 30 minutes and £2 later, they now both work.

Michael Ricketts, Cheltenham

OK, you've got a point concerning the 1.2 compatibility, but as you've already noted, availability is the issue. Whether you like it or not, you're in a minority which is ever smaller.

The real issue is not the lack of 1.2 compatible software on our CoverDisks, but rather your illogical refusal to invest a relatively paltry sum on a ROM which would instantly make your machine compatible with just about every piece of software on the market.

I can understand your annoyance, but we deal with technology not antiques. If you insist on running a classic car it's inevitable you'll have trouble locating parts.

As for your comments concerning commercial software, I admit you may be right on occasion. Certain shareware and PD releases are just as good, if not better, than their commercial counterparts.

However, thanks to the fickle attitude of the buying public a 'worth £100' flash on the cover of the magazine simply guarantees better sales.

Alas, superior editorial does not ensure superior sales. If you don't play the game when it comes to acquiring commercial software, you simply don't sell – regardless of editorial content.

I get a feeling you're not particularly keen on the new look of the mag. Well, as you quite rightly pointed out, it does make the mag stand out from the crowd – which in our opinion isn't exactly a bad thing.

With regard to your ideas concerning less graphics and more programming, I think the existing mix is fairly good, we already have monthly support for Amos, ARexx, Assembly and, up until February, Blitz basic.

Add to that regular coverage of the latest in programming support and software and I think we're doing more than most to fly the programming flag.

As for the type style used for what's known as the headline font, again you have a point. We consider it to be a valid design point, but admittedly it has proved unpopular with some readers.

As a result you'll be pleased to know we are looking at an alternative type face. However, as for your comments about our art editor I'm afraid we'll just have to differ, in my opinion he's still the best in the business.



esp EZRA SURF'S POSTBAG

Not so Easy to find

I recently invested in a copy of the Christmas issue of *Amiga Computing* which carried the Easy Amos CoverDisk.

Finding the CoverDisks to be of great interest I then read the advertisement inside the magazine for the Easy Amos Manual, but could find no address to send an order.

Yesterday I phoned IDG to ask for the address from which to order a copy, but was told that, due to heavy demand, it was sold out and that there were no plans for a re-print.

If there is to be no re-print of this manual, could you please tell me if there is any other source, so that one may make full use of the Easy Amos programming language.

Roy Hutchings, Royston, Herts

Alas I'm afraid the answer is no. As stated by the disembodied voice at IDG, the demand has been huge and as a result we've sold out.

Unfortunately, it's also highly unlikely Europress Software – the authors of Easy Amos – will have any in stock, as we made a bulk buy of their remaining stock prior to the CoverDisk give-away.

Worst still, it's very unlikely there will be a reprint of the aforementioned manual as it simply wouldn't be financially viable for either IDG or Europress Software.

The only thing I can suggest is that you scan the small ads in search of any copies of Easy Amos which haven't already been snapped up.

Compatible with my Amiga

I noticed that in your January issue you published a letter from someone complaining about CoverDisk incompatibility with Workbench 1.3.

I have the same problem, so when I recently bought your sister mag, Amiga Action, specifically to get hold of a give-away cheat disk, I was not pleased to discover that it didn't work on Workbench 1.3 after reporting to be compatible with all Amigas.

I was about to write them a stroppy letter when I noticed among the *Amiga Computing* adverts one from Software 2000 offering a Workbench 2.0 emulator for 99p. I bought it and it worked like a charm, allowing access to the cheats program and indeed all the Workbench 2.0 CoverDisk software I've tried. It even gives you the Workbench 2.0 intro screen.

Mr J Holden, Wigan

I do enjoy a happy ending... If anyone out there wants to follow Mr Holden's lead, Software 2000 can be reached on: 0374 678068.

Got something to say through the pages of AC? Ezra Surf is our mailman, dedicated to reading your letters and selecting the most interesting for publication. Drop him a line at:

Ezra Surf's Postbag , Amiga Computing Adlington Park, Macclesfield SK10 4NP

Please don't enclose saes as Ezra just hasn't got enough paper to reply personally. He might also have to shorten your letters, so don't be offended if you end up getting the chop.

CoverDisk data

Due to the pressure to run commercial software on the CoverDisk, it has been necessary on more than one occasion to axe or postpone the inclusion of support files which have been promised within various tutorials.

Although far from ideal, we're afraid there's often been no alternative, which of course has quite rightly annoyed some while infuriating others. The latter invariably being those following Paul Overaa's excellent assembler series.

As a result, Paul has kindly compiled all the code written for the series onto a single floppy which we'll be more than happy to supply to any irate programmers who need it.

All requests must be in writing and to the usual address. Please add RE: Assembler code in brackets.

Paper perplexity

I've been an Amiga (ab)-user for several years now and must say that I've spent many any enjoyable evening and sometimes days bashing away at the keyboard, perfecting my art and game skills. I find it hard to comprehend why anyone would want another machine.

My 500 has stood me in good stead over these years and for my purposes has been very, very beneficial. With my copy of Pen Pal, Deluxe Paint 3 and Sculpt, I have the potential to ring out my creative needs very successfully.

I would like to commend *Amiga Computing* for its serious approach to the Amiga world – all the other mags are a bit gamesy for my liking; I like a good informative read. I do have an enquiry though about the quality of the actual paper in your mag. Firstly, the cover seems to have lost that shiny gloss that made it sparkle down from the shelves and, secondly, the actual page quality feels very similar to a toilet roll I once bought from Nettos.

It's a shame to see hard work and excellent writing being presented in such a way. One must assume the decision for poor print quality was taken at a higher level. I'm confused further by the apparent fact (stated by yourselves) that IDG are the biggest IT publishers in the world – if they are, surely they can afford the Andrex deluxe paper quality of all computer magazines.

Also, I can't help but feel that you may well be sending out the wrong message to potential readers – while *Amiga Format* remains its usual glossy self, *Amiga Computing* suffers. Surely, IDG should be able to keep up with the Jones'. If they don't make the effort, why should the customer?

Anyway, I don't know any of these facts for certain so I would be very interested in hearing your usually enlightened point of view. What ever your reply, be rest assured, I shall keep buying your publication.

R Jarman, Nottingham

We're always pleased at *Amiga Computing* to hear about a dedicated Amiga user – it's what has kept us in a job over the last few difficult months. If punters like you didn't exist, there would have been no bid for the old Commodore and the rights to AGA would have simply been sold on to some vampire of an international company to suck the blood out of and then throw the corpse to the vultures.

Your enquiry about paper is a fair one. Unfortunately, us poor writing folks don't really have any say in the actual costs of printing the mag and its physical quality. At the end of the day, we haven't a clue why the print quality has suffered but, rest assured, we'll keep providing you with the highest quality of writing regardless of paper quality.

Makes a change

I am just writing to say how much I enjoyed your article on Cybersex. As a woman, I frequently find myself reading this or that article – in almost every woman's magazine – promoting sexual exploration and particularly masturbation as a means to gaining confidence in the bedroom.

To me, Cybersex would be a great technological advancement to this idea, providing men and women with both an exciting and highly pleasurable way of discovering their sexual needs.

The article does touch upon the danger of Cybersex in creating an increasingly isolated attitude towards sex, in that people will enjoy the computerised version more than the real thing.

On the contrary. I believe that the emotional involvement of a serious sexual relationship will always intensify the sexual experience to a degree far outweighing technological capabilities. The exciting prospect of Cybersex is that it will liberate people's confidence and sense of adventure in their relationships; with any luck men and women will feel that they can ask for exactly what they want from their partner.

I only hope for one thing; that such ideas as Cybersex won't be crushed under the ridiculous arguments churned out by those who essentially fear anything to do with sexual adventure. Women, in particular, have been sexually repressed for far too long.

Even today, we find that it is women who try to hide the fact that they masturbate because we feel strangely ashamed of the fact. Please, please, lets keep the clocks moving forwards and accept such great innovations as cybersex.

Only then might we see people finally tearing themselves away from the vast sexual inhibitions that plague every one of us.

Miss C Tarret, Stoke-on-Trent

Isn't freedom of speech a wonderful thing., However, before the letters start pouring in attacking or otherwise the views of Miss Tarret, please remember that the article which inspired the debate was a speculative piece which simply attempted to point a quizzical finger in the possible direction of increased interaction between man, woman and machines.

I doubt anyone really envisages electronic appendages taking over from the real thing. However, if such developments can enhance a shared experience, and thereby further cement relationships, its potential shouldn't be ignored or discouraged.

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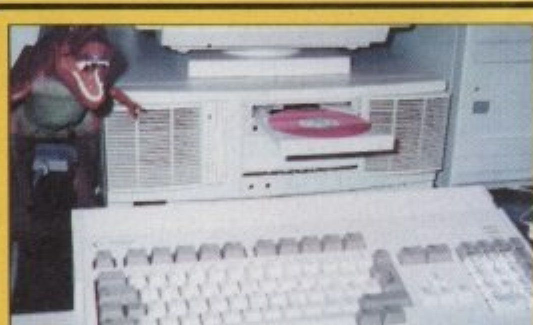
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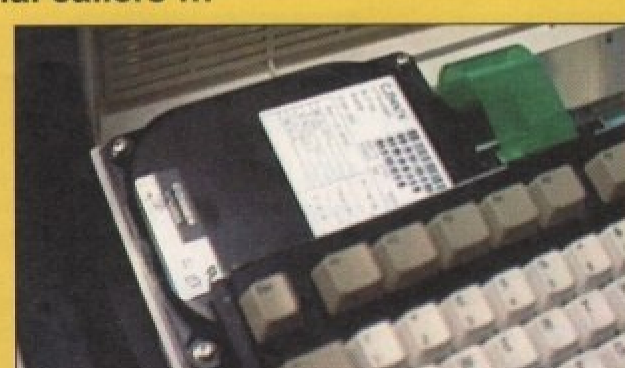
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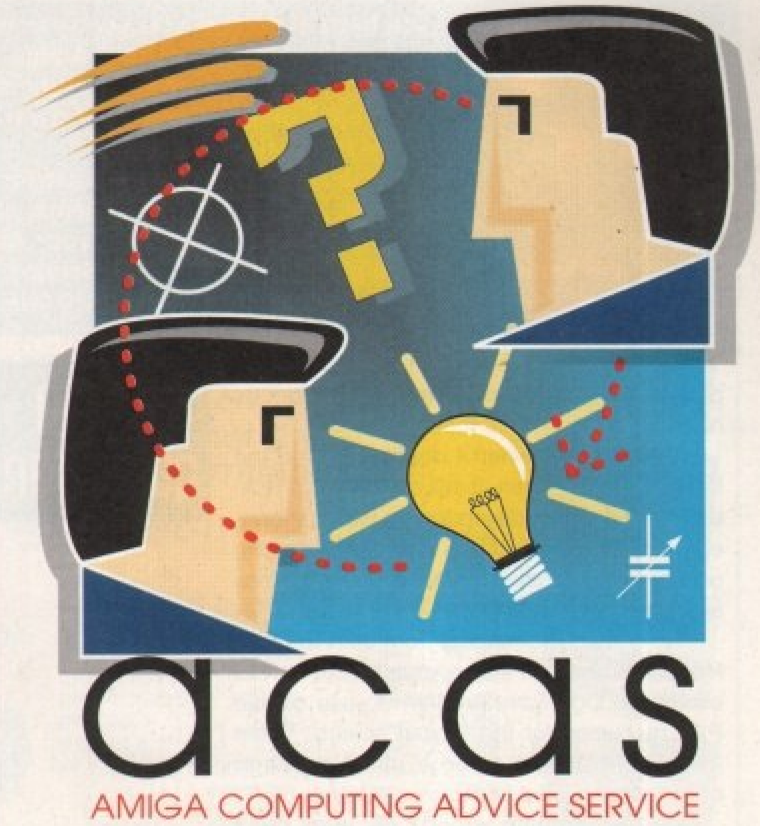


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Delete dilemma

Please help me. I am having problems deleting a drawer from my hard disk partition. The drawer used to contain a database application but I recently got a better version and decided to throw the old one away.

Unfortunately, my A1200 won't let me delete the drawer and gives an 'object in use' error when I try.

Why doesn't it let me delete the drawer – everything that was in it seems to have been deleted. It's starting to annoy me to the point of taking an extremely heavy axe to my Amiga.

I. Hackely, Bedfordshire

You can put the axe away as the problem is relatively easy to solve. Some programs automatically create Assign statements in the *user-startup* or sometimes in the *Startup-Sequence* script in the S: drawer.

These Assign statements tell the operating system where it can find certain files and drawers. It seems that when you installed your database program, it also automatically created Assigns for it.

Load up your favourite text editor and then load up the *user-startup* file in the S: drawer. Any program worth its salt will have comments showing where the relevant Assigns created by it start and end.

For example, if your database was called something like Access, look for something along the lines of ;BEGIN ACCESS and ;END ACCESS. Between these comments, you should find the relevant Assign statements for your database program.

Once found, delete the ;BEGIN ??? and ;END ??? lines and everything between them. Next, reboot your Amiga and try to delete the drawer – you should find your problem is solved.

If you can't find any reference to your database program in the *user-startup* file, try the *Startup-Sequence* file, although any programmer worth his salt should only alter the *user-startup* file to avoid confusion.

Another reason why a drawer may not be deleted is if it contains a protected file. Protected files cannot be deleted and hence the drawer which it is in will not be deleted either. This isn't the case with your problem however, as you would get an 'object is protected from deletion' error.

PCMCIA blues

What is the point of having a PCMCIA slot on our trusty A600s and A1200s when there don't seem to be any products available for it. Maybe Commodore should have left it off the design board and cut the cost instead.

D. Whiteley, Birmingham

It's true that PCMCIA products have been slow to appear, but such products seem to be gradually making their way onto the market. Over the last few months, however, there has been an increase in products such as hard drives, digitisers and CD-ROM interfaces. Maybe this is the start of something wonderful.

Lightwave interlace

Please help. I recently bought the standalone PAL version of Lightwave, the rendering software from NewTek. At the same time, I also splashed out on a new multiscan monitor to take advantage of those juicy high resolution modes without the damned flickering you get on normal monitors.

After arriving home, I immediately set about changing Workbench's screen mode to high resolution double PAL with no flicker, giving me a spacious 676 x 542 screen resolution – a big improvement on the standard PAL resolution of 724 x 283 on my Phillips CM8833-II.

After setting up Workbench, I installed Lightwave and its nifty dongle and double-clicked on the Lightwave program icon. As it loaded I waited with bated breath, with visions of working in a spacious and stable display creating 3D masterpieces and animations rolling around in my head.

You can imagine my disappointment when Lightwave's main screen appeared, in glorious flickering interlace mode. I immediately quit out and checked the Workbench screen mode had not mysteriously changed, but no, it was still set at double PAL resolution.

After much unsuccessful fiddling with the Overscan and ScreenMode utilities, as well as trying various monitor driver combinations in the Devs drawer, I decided to turn to the Lightwave manual.

Now, you may know that Lightwave consists of two programs, Layout and Modeler. Double-clicking on the Lightwave icon takes you to the Layout screen with the ability to switch to Modeler by clicking on the Modeler button. However, Modeler is also a standalone program which you can run by clicking on the Modeler icon.

The Lightwave manual mentioned a utility called Changemode, which was in Lightwave's Utility drawer. Running the Changemode utility did offer me the choice of which screen mode to run Modeler in and after choosing double PAL and running Modeler as a standalone ➤

Wassat then?

Er, from this question, you will quickly ascertain I'm very new to this Amiga computer business, in fact, I'm new to computers period. Just what is Kickstart?

D. Erikson, Wolverhampton

I like 'em simple (the questions that is). Kickstart is simply that part of the Amiga's operating system (OS) which is held in ROMs (Read Only Memory), inside your Amiga. The rest is contained on the good 'ol Workbench disks.

This makes it much simpler and easier to upgrade and fix problems to the operating system than it would be if the OS was contained completely in ROMs. Such a hardware and disk-based system is essential for powerful multitasking systems which the Amiga provides.

I've used PCs for some time now and believe me, even multitasking operating systems available for the PC don't come close to the reliability and ease of use of the Amiga OS.

There are various Kickstart versions around, with A500s having either 1.3 or 2.04, Amiga 600s have 2.04 or 2.05 and A1200s and A4000s have 3.0. The latest version, 3.1, has recently been released also.

Do you have a problem? Do you sometimes find yourself poised over your Amiga with axe in hand, spouting profanity at the stubborn refusal of your Amiga software or hardware to behave properly?

Well, calm down and swap the axe for pen and paper, jot down your problems, along with a thorough description of your Amiga setup, and send it off to Amiga Computing Advice Service, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP.

Any questions?

program, it did indeed come up in glorious no flicker, double PAL mode.

Unfortunately, when I double-click on the Lightwave icon again, it still comes up in flickering interlace mode and even more strangely, when I try to switch to Modeler by clicking on Layout's Modeler button, Modeler comes up in interlace mode too.

I have read the manual from start to finish four times and can find no mention of how to inform the Lightwave program to use double PAL resolution for the Layout screen. There just doesn't seem to be a utility or menu option to tell it what to do.

What am I doing wrong? My eyes can't take this flickering interlace mode when trying to design 3D objects and animations. Can you help?

J. Smithson, Bolton

Don't fret, the answer is a simple one. The Lightwave program is not being promoted to the double PAL mode. This is because you must have Mode promotion turned off.

Simply go into the Prefs drawer and double-click on the IControl icon. Under the heading Miscellaneous, you should see a button labelled Mode Promotion. Click on this button so that a tick mark appears, then click on the Save button.

If you run Lightwave now, the Layout display and Modeler will be promoted correctly and, much to the delight of your eyeballs no doubt, the flickering will be gone.

Speedy Sims

I have recently bought an A1200 after seeing my friend playing flight simulator games, such as *A10 Tank Killer* and *Tornado.*

However, A10 is slower on my machine and Tornado is almost unplayable. My friend has an A4000 so I expect the games to run faster on that, but I wasn't expecting such a drastic loss in speed on a 68020 A1200. What is the best course of action to speed things up.

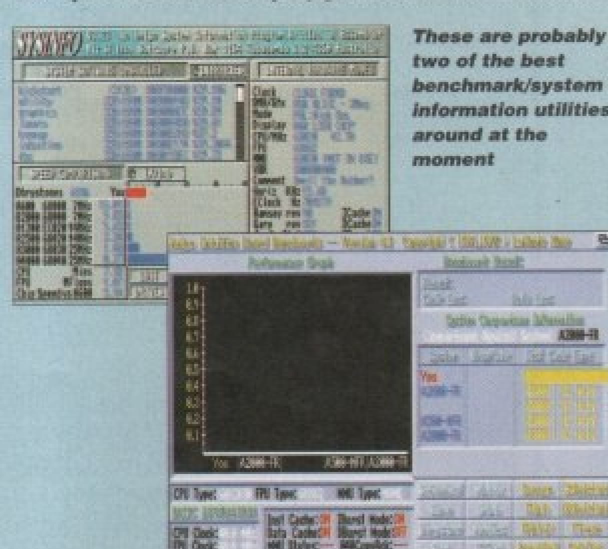
M. Strickland

I would guess that you have an unexpanded A1200. Simply adding extra memory via the trapdoor (not PCMCIA memory cards) will almost double the speed of your machine.

Also, many of today's memory upgrade boards come with maths coprocessor slots for 68881 or 68882 chips. These will also add extra speed to the maths routines which many flight sims use.

For ultimate power, a 68030 accelerator will really make everything fly (pun absolutely intended). Of course, these are much more expensive than simple memory upgrades, but are worth it.

Check out the many adverts in this issue for the best prices on memory upgrades and accelerators.



These are probably two of the best benchmark/system information utilities around at the moment

Slow screen

I am a newcomer to the Amiga scene and have had my A1200 for about four weeks now. I am one of those people who like to leave the manual in the box and start experimenting in order to learn. After much experimentation with the various Workbench utilities which are on my hard drive, I now find that my A1200 seems to be operating much more slowly.

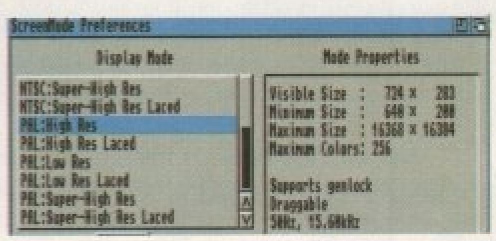
Whenever I open a drawer, the icons seem to take much longer to appear than they did when I first installed Workbench. Also, simply moving windows around the screen seems slower. Why is this happening and how can I fix it?

C. Wright, Sussex

I would guess that in your experiments you have managed to set your screen to 256 colours. In the Prefs drawer, double-click on the ScreenMode icon and you will see a slider control for the number of colours (or colors as our American friends spell it).

Set this to a lower number (not two as your Workbench will look awful) and click on the Save button. You will find things are much nippier now.

If you really want a 256 colour Workbench, the only other option is to buy an accelerator card to overcome the slower screen updates.



To speed up screen re-draws while working in Workbench, set the number of colours to a lower level

Full steam ahead

I have just upgraded my A1200 with a DKB 68030 accelerator along with an 8Mb SIMM fitted to it. I've also slapped in a 40Mhz 68882 maths coprocessor.

Things seem to be speeding along magnificently in the graphics department but I would like to get a rough idea of how much faster maths functions are. I am eager to start experimenting with 3D graphics, in fact, I'll shortly be getting hold of Imagine 3.

Can you recommend a good benchmark program which will give me an overall indication of the processing power of my new setup?

L. Perry, Southampton

Two of the best benchmark programs are Sysinfo and AIIB. These are readily available in PD libraries and give both processing power figures and also comprehensive system information.

RISCy business

I have heard reports that, when the Commodore buyout business is resolved and, if Amiga International are successful, a new RISC-based machine will be developed.

Is this true and will this machine be backward compatible with the existing Amiga range of software?

E. Pool, Yorkshire

This new RISC-based machine business is still up in the air, although it is quite possible. However, I am hoping that backward compatibility is not something they will aim for.

Any significant step up in power (and that's just what a RISC system will offer) can only be held back by tying it to lesser technology.

This may upset the diehard Amiga fan, but does anyone think the Amiga would be the powerful machine it is if it was forced to be compatible with the Commodore 64? I think not.

One possible scenario for Commodore would be to provide a much improved Amiga technology-based machine, such as that found in the A1200, but with enhancements such as SCSI interface, Zorro slots and maybe a CD-ROM. All that would be required is a box to fit the goodies in and the right price tag to make it a mass market attraction.

I, for one, would buy such a machine while I saved my pennies for the RISC beauties. For now, we can only wait and see.

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The pot

Following the success of Animation Workshop, the creators of such highly regarded graphic utilities as Pixel Pro have developed the new version, Anim2. A co-ordinating package that removes the need for using multiple programs, this new version promises to bring creative plans to life.

Axiom's main aim was to create a powerful software package which could be used with the minimum of technical difficulty. For that reason a lot of effort has gone into making the program's functions easily accessible.

The first noticeable difference is that the interface has been redesigned. On booting Anim2 the user is presented with a similarly functional control screen, but it has been refined to display the new version's greater range of features in Hi-res.

Organised into six work sections, Anim2 can be mouse or keyboard driven. Because all the options are on-screen there's no need to go searching through pull-down menus, and this alone makes for greater simplicity of use.

The key working area is the file list, because it's here that individual images or animation sequences can be swapped and combined to create your overall presentation.

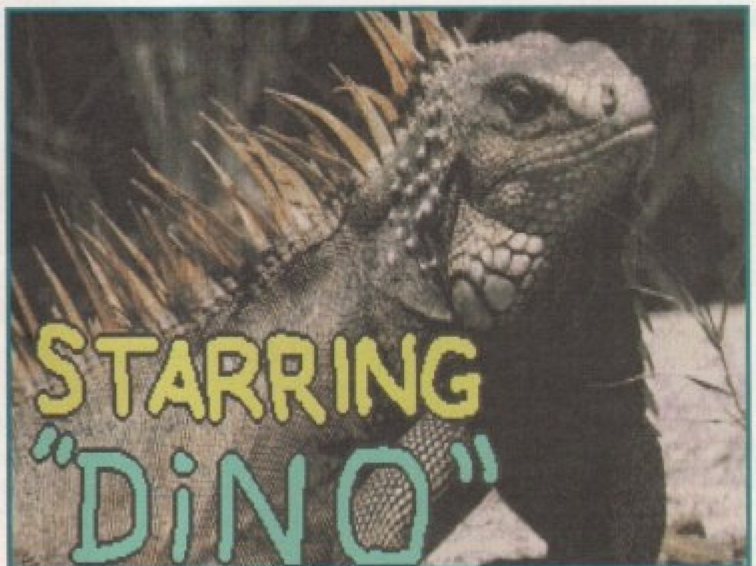
ALTERED ANIMS

Any completed animation can be edited, with the program allowing the user to insert and delete sequences to order. It's all easily done, with deletion accomplished by tagging each individual frame; however, a way of tagging a string of frames at once would have been welcome.

Anim2's value is founded largely on the fact that the software features good support for ARexx, the Amiga's powerful programming language. This means that the package can be used with other products supporting ARexx, or with programs that users write themselves.

It's important to emphasise that Anim2 is not a stand-alone program. However, unlike its predecessor, this version supports ImageFX as well as ADPro, and the process for communicating with these packages is totally automated.

Once an animation is created, it's possible to convert it into other resolutions or colours, reverse, flip, or scale it. On top of that, any ADPro/ImageFX operator can be applied such as ADPro's Antique, Blur or Line Art processes.



Tutorials have been included in the package in which you develop an introduction to a show starring Dino

When viewing the animation, a control panel can be called up at the bottom of the screen. As well as the basic play and pause functions, it's here that frames are tagged so that effects can be added. This means, for example, that the user can choose exactly the right point to add a sound effect.

For those interested in computer model animations, Anim2 can be used to create an animation 'on the fly' while a 3D program like Lightwave renders each image. However, the problem is that Anim2 takes up a fair amount of memory and this will slow the rendering process down.

Speed of playback is altered using the function keys, each one representing a different frame per second (FPS) rate. It should be noted that because some animations have large changes in the images from frame to frame, you may not always get an anim to play back at the frame rate you set, but at least the control panel will let you know if you're getting the speed you desire.

PARAMETERS

Back on the main interface, there's a panel allowing you to add text to the animation. However, this is only really useful for adding information about the author's name, notes or a copyright.

A strong point for the package is the number of tools available. Important for the videographer, for example, is the range of parameters that can be set up using the convert and batch convert tools.

Using a simple requester, you can alter the number of colours used, the resolution, overscan (horizontal/vertical, or both) and the size of the viewport used for the animation. There are also variable settings for monitor types and for dithering.

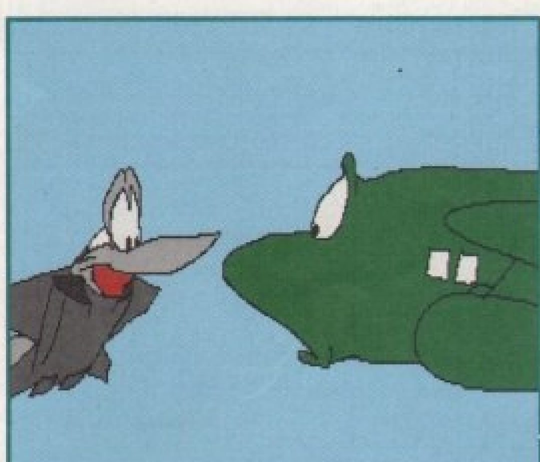
File management tools are more flexible

An extra dimension

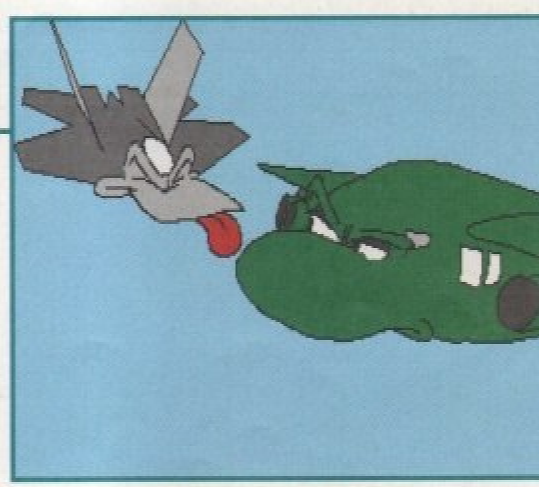
Music and sound effects are indispensible for many animations, and the facilities for adding audio are one of Anim2's advantages. Accessing the current frame information requester allows the user to add, edit or delete all the animation's sound cues.

Anim2 allows you to choose from the Amiga's four sound channels and set priorities for each one. Setting a channel for foreground sound works well for spot audio effects, while background sounds repeat and are good for looping music throughout the animation.

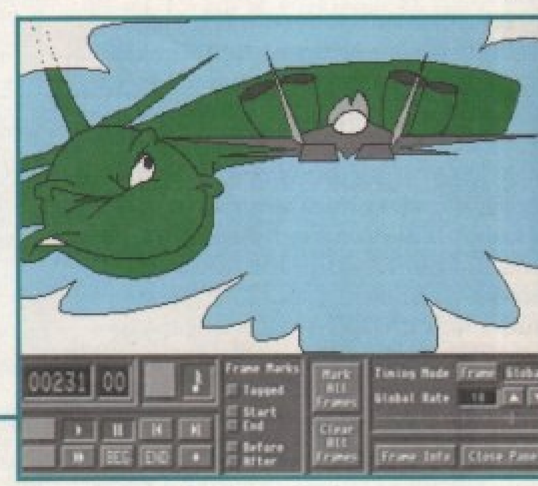
It's also possible to modify the foreground and background options so that they interrupt or give priority to a sound begun in a previous frame. Add to this the volume control and the fact that Anim2 now supports .Audio files for working with older style animation players, and the sound facilities begin to look very useful despite their simplicity.



Included on the data disk is ATF Agility, an animated short from Erik Schwartz giving you an idea of what can be achieved



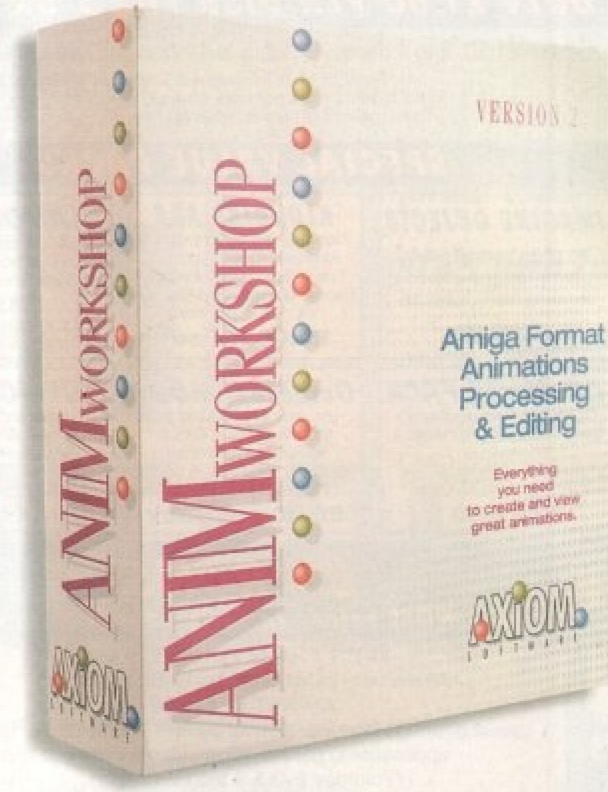
The animation is accompanied by cartoon sound effects, all of which can be easily applied to the right frames using Anim2

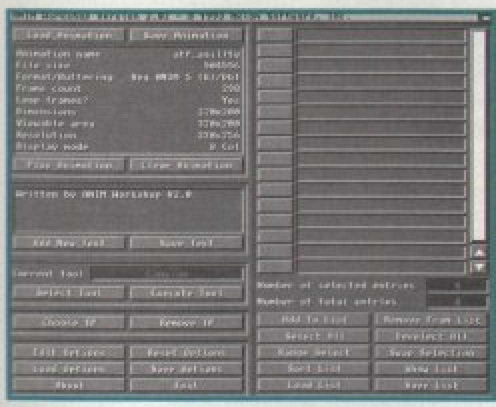


The control panel can be called up at anytime simply by pressing the Return key

Melting

Once again the Amiga graphics market is graced with a high quality utility, this time in the form of Axiom's AnimWorkshop2. Gareth Lofthouse reviews





A new Hi-res interface graces the software's front-end

than those found in the original version. Useful time savers include the function 'move files as they are used', a tool which can move selected files to a specified directory and rename it in the process.

Overlay is a new tool which will take the current loaded animation and composite it on top of the files in the file list on a frame by frame basis. This is a big boost for creativity, because animated text for titles can be overlaid on top of a background moving sequence.

This feature is again controlled by its own requester, giving the user the option to select transparency for certain overlaid colours, or to centre the foreground animation over the background animation.

Another new feature is Time, which allows you to stretch or squeeze an animation by displaying the current frame count and asking for a desired frame count. This procedure alters the animation so that it fits into the new frame count.

The Histogram tool can be used to determine whether or not you can convert an animation into fewer colours in order to make it smaller and faster playing. For example, if there's an animation that loads as a 32 colour animation, the histogram will analyse it to see how many unique colours are used; if it's 16 or less a faster anim can be created without losing any quality.

Anim2 will usually be used for combining images together to produce the finished product, but the separate tool will also allow the user to save each tagged frame as a separate IFF file. Similarly, split will divide a presentation into smaller animation segments.

I do have one gripe. At £80 a buyer should expect high quality supporting documentation of the standard you get from a company like Digita International.

Unfortunately, what you actually get from Axiom is a very shabby effort. The manual's actual contents are all reasonably helpful, but the fact that it is held together by three key rings leaves me wondering how long it will be before important pages fall out and go missing.

Finally, a word of warning when it comes to installation. There is a registration procedure that seems to be exceptionally vulnerable to mistakes. You only get one chance to get it right, so any buyer had better read the accompanying .read me file very carefully.

What's new ?

Those of you who have the Anim Workshop coverdisk (Feb '95 – issue 83) may want to know what you get with the upgrade, so here's the comprehensive list:

- Full AGA support for A1200 and A4000 machines.
- Anim7 and Anim8 animation formats. These new Anim formats use 32-bit encoding to play back at top speed.
- FixAnim utility to fix old animations created using old op-5 animation programs such as VideoScape 2.0.
- New Hi-res interface with pop-up menus for easy selection of multiple choice options.
- Support for ImageFX in addition to ADPro image processing features.
- Improved file list management. It is now possible to load a list of files using multiple asterisk wildcard characters. For instance, ***stars*** is able to load a list of images containing the string 'stars' somewhere in the name.
- Improved ARexx support.
- Included ARexx programs for processing images/animations.
- Author text information can be embedded into the animation file. This allows copyright and author information to be encoded directly into the animation file.
- New Offset, Overlay and Time tools.
- Supports .Audio files for working with older style animation players that support this feature.

Verdict

A processing package aimed at Amiga animation was always going to have an appeal, and fortunately there has been a considerable increase in the software's power and flexibility in this latest version.

The new Hi-res interface had too many functions crowded on-screen to be instantly appealing, but the fact that the user gets instant access to all commonly-used features more than makes up for this problem in the long run.

This is not to say that the package is not without problems. There's that insult of a manual for one, and our review copy didn't seem entirely stable when we got it up and running.

However, these are not the sort of complaints to take too seriously. The price may put the package out of most fun users' league, but anyone with more serious creative plans should find Anim2 highly appealing.

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RED = Essential **BLACK** = Recommended

Imagine 1.5+
Or ADPro 2+

The bottom line

Product: Anim Workshop2
Price: £79.95
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Ease of use	8
Implementation	8
Value for money	8
Overall	8

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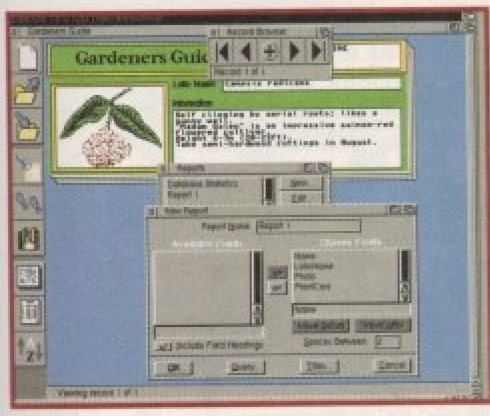
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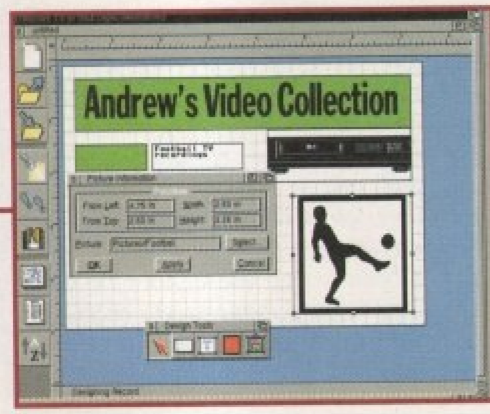
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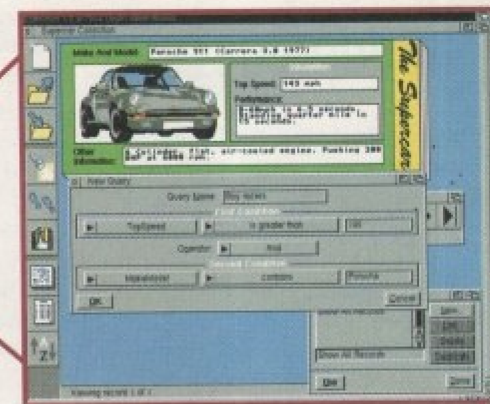
Access VISA



Setting up reports is easy, but the reports themselves are inflexible



Layout design is taken care of by easy-to-use tools on a floating tool bar, giving the user plenty of leeway to get creative



Queries are the program's best feature, and make it possible to filter a database with great accuracy

Record of success

Andrew Espenshade examines Datastore, Digita's new filing cabinet partner for the best-selling Wordworth package

Since its launch a couple of years ago, Wordworth has been the leading UK-coded Amiga office package, and the look and feel developed for its impressive modern interface has been echoed in other Digita products or copied by competitors. Now, Digita have taken the icon-driven, point-and-click style and applied it to their latest package, Datastore.

The database market hasn't seen much in the way of new entries for a while now, and it's refreshing to see a UK software house prepared to launch a home office program into a market which has seen so much uncertainty since last summer's Commodore crash. Sharing the same general approach as Wordworth 2, Datastore has to be the most modern-looking Amiga database, if nothing else.

As a bonus, the program is much more accessible than its heavyweight Wordsmith twin. Coming on just one disk and designed to work with both floppies and hard drives (unlike Wordworth 2), Datastore is a program for almost any Amiga. It will run happily on a standard A1200, and even users of 1Mb A500s (remember them?) shouldn't feel left out in the cold so long as they have Kickstart 2.04.

FRONT-END

Installation is quick and simple, and it isn't long before the program's neat custom front-end pops up on screen. At this point, the new user will notice the by now standard Digita icon bar down the left-hand side of the screen which offers common commands you'd normally have to access a menu to reach. The main screen is a simple design grid sporting a floating tool box with four icons dedicated to creating the user's own record layout.

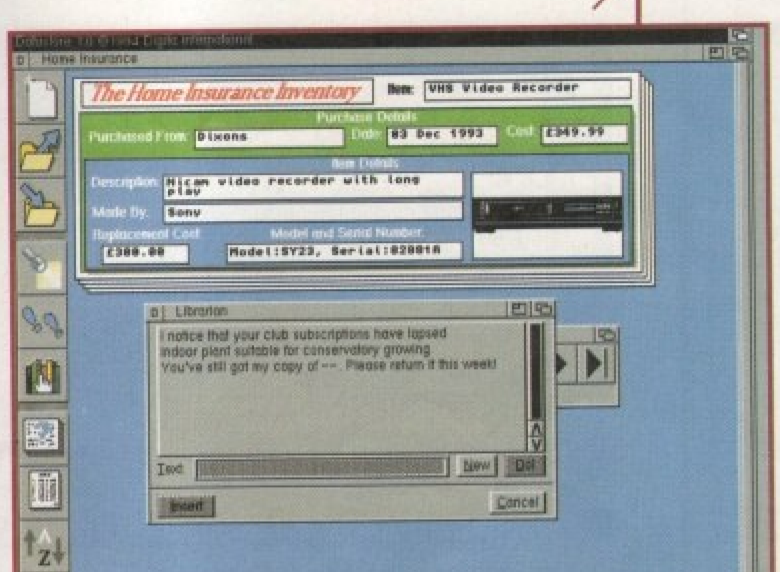
For the lazy ones among us, Digita have included a number of pre-defined database styles on disk, and as these cover the ubiquitous CD list, address book, and club membership styles, there should be a template for most common uses. If not, or you're one of those people who insists on getting their hands dirty, the design process is about as easy as Digita could have made it.

The usual field creation tool is available for simply slapping down a number of boring old data fields and getting on with it, but if you want to be artistic you can make use of the box, caption, and picture frame tools. Boxes can be drawn in any size and colour available from the current palette, and are used to brighten up the layout or create a backdrop for text.

Similarly uplifting is the picture frame icon which enables the user to create an empty frame anywhere on screen, then import an IFF image to be displayed at the same time as the data. These two tools give Datastore records a very snazzy look, but I found that when too many are used the whole program starts to slow down rather like its older brother, Wordworth.

Digita's biggest remaining problem with their interface design is that it can be very slow at times, especially when fast RAM isn't available or you are using a vanilla 68000 processor, and Datastore is no exception to this. The program *can* work quickly at an acceptable speed, but if you decide to get too artistic you should be prepared for the consequences.

The Librarian feature is the same as Wordworth's, and can be used to store commonly used phrases



VARIETY ON TAP

When you do splash a bit of colour around, Datastore produces very satisfactory results, and hard drive users with access to long lists of outline fonts will be pleased to know that any of these can be used to bring variety and extra visual appeal to custom record designs. Those who use A1200s will also be pleasantly surprised to find support for Workbench 3.0 datatypes, which means you can use just about any image format in your records if you have the correct plug-in datatype.

Actually designing a template is very simple and a matter of just positioning the various boxes, fields, and pictures anywhere on screen before saving the whole thing to disk. To keep things neat and tidy, there's a layout grid, and users can select the snap-to-grid option to keep all those elements nicely lined up.

Once a template is designed and the user gets down to using a database properly, the program's solid list of features makes finding and organising information just as easy as creating the layout. Easily the best of these is the query function, and it works as well as on much more high-level ➤

Jargon buster

Fields – Any area into which text, numbers, or other data is entered
Records – 'Pages' of information composed of several fields
Database – A 'book' of pages, the pages being individual records
Query – A way of interrogating the database to find out how many records contain data matching the query conditions
Calc fields – A field which contains a mathematical formula. The calculation is usually based on the data held in other fields in the record, and the result is shown on screen in the calc field. A good example is VAT calculation based on an existing field containing an item's price
Report – A way of organising the print-out of a database so that only the data fields you specify are printed. A complete club database containing information on subs and membership numbers could use a report format to simply print out the members' names and phone numbers
Mail merge – The technique whereby a file of names and addresses is saved in a format which a word processor can use to print the same letter many times over, each time with a different name and address attached

➤

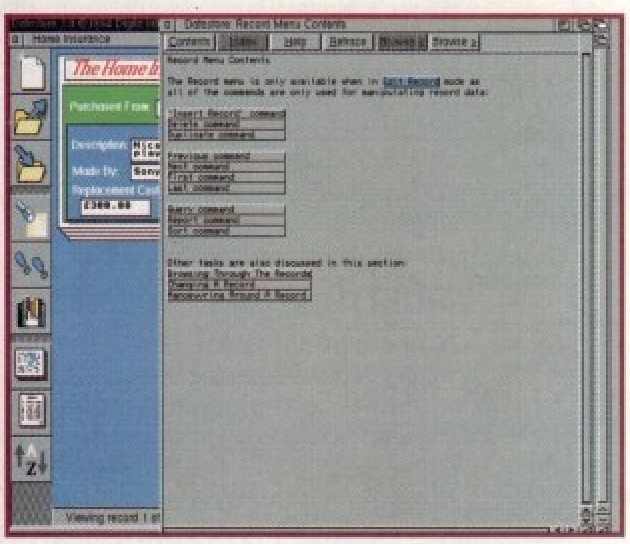
packages. Organising your information is easily as important as finding a particular record (Datastore also has a fast and simple find function to search for a particular word), and the query feature does just that.

Boolean operations are used along with the usual 'starts with...', and 'contains...' conditions, so it is possible to look for all video cassettes whose titles start with 'football' and whose recording dates are before, say, December 31st 1994.

This is made possible by query's ability to examine any two fields in the current template rather than just a single query condition, making it much easier to narrow the search down to a specific collection of records. Once these have been isolated by the search, users can give them a subset name, such as 'books about golf' and quickly go back to this specific subset at any time in the future.

> Fields can be made up of the usual wide range of types, including dates and currencies, and there are plenty of options for setting the type of decimal notation used and so on

If extra records are added later, the query can be run again to bring any new records which fit the description into the subset, though it would have been nice if this happened automatically. Still, it's good to see such an important data organisation tool as this in a database costing so little.



There's a good on-line help feature in the shape of AmigaGuide, but both this and the manual could have displayed a little more depth

FIELD OPTIONS

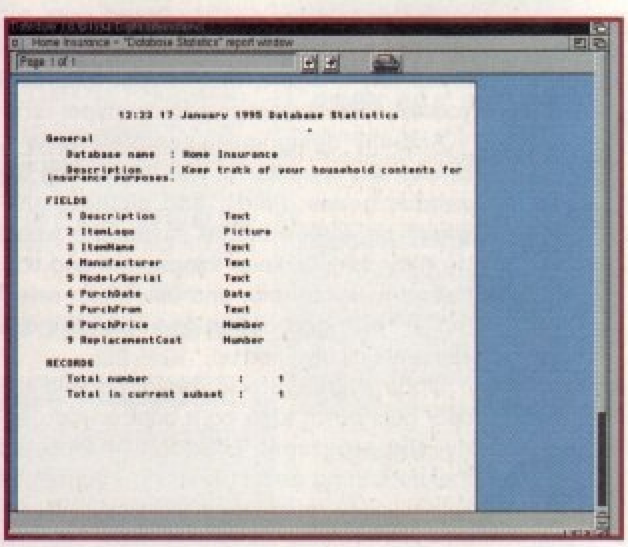
Fields can be made up of the usual wide range of types, including dates and currencies, and there are plenty of options for setting the type of decimal notation used and so on. In addition, there's a true/false field type for testing yes/no answers, so you could set up a field to keep track of which videos you'd loaned out to friends – very useful when you have lots of videos scattered around all over the place. For calculations, each 'amount' field can have a user-defined formula attached which makes it simple to set fields to calculate tax payable on income, VAT, and so on.

Getting the information out of the database and onto paper is taken care of in two main ways. The usual mail merge lis of names and addresses can quite easil be output for use in Wordworth, and the program outputs directly to a file forma that Wordworth will eat up with gusto.

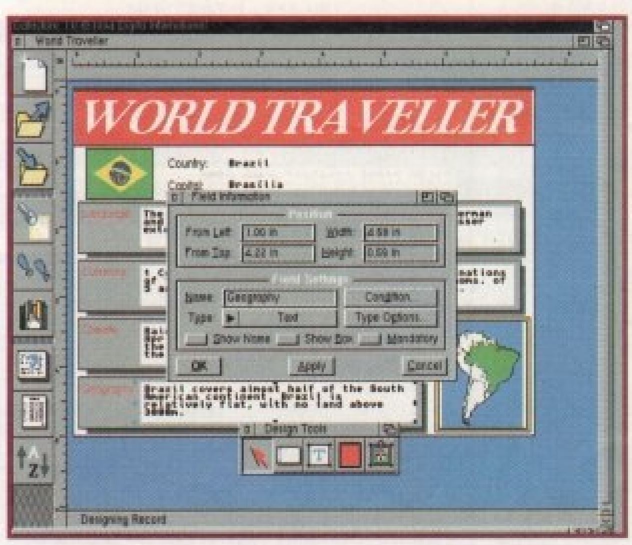
Reports, however, are not as wel implemented as they might be. Setting them up is easy enough, and a simple matter of just choosing the fields to be included in the report. However, there's no way to format the report or change the way it is organised on screen. Datastore has no built-in label printing functio either, and this makes using the program for producing invoices or address label virtually impossible.

Uses such as this are some of the mos important to database users, and I find i surprising that Digita could have include so many good design and query feature while leaving out something so fundamen tal. Report printing is one area which the company should take a close look at fo future versions of the program.

Having said that, reports can be printed and in a reasonably useful format. If yo want nothing more than a printed recor of what is in the database, this is fine, an the mail merge feature makes up in par for the lack of label printing.



This is the way reports will look when printed, and if you don't like it, that's just too bad



Setting up fields with access to a variety of field types and formatting options makes creating a record layout even easier

A winning streak

All told, Digita have come up with a winner. Unless you have a 68000 machine, on which the package can run very slowly, this is one office package you won't regret buying. It has several powerful features, it's easy to use, and has great design and layout features. Databases will never be the sort of software to quicken the blood and bring hormones to the boil but Digita have at least made theirs interesting.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

1 Mb RAM
2.0 Kickstart
68020
Hard drive

The bottom line

Product: Datastore
Supplier: Digita International
Phone: 01395 270273
Price: £69.99

Ease of use	9
Implementation	7
Value for money	8
Overall	8

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public sector



Dave Cusick puts a plum under a viper and bids you to step into the world of the cheap and cheerful

As the old proverb goes, 'Why buy a cow when milk is so cheap?' I doubt whoever coined that phrase had PD in mind, but they might as well have done. There's no point splashing out on all-singing, all-dancing commercial offerings when plenty of high-quality software is available for a couple of quid...

Lottery Winner AGA

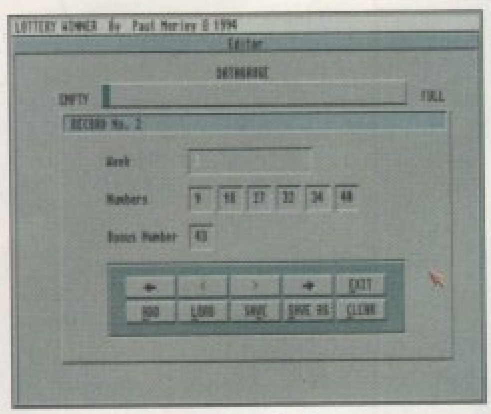
Programmed by: Paul Morley

Available from: OnLine PD
Disk No. OX101

Lottery fever has been gripping the nation since November and the organisers, Camelot, have been raking in the pound coins of prospective millionaires the country over. Of course, the odds of actually winning the jackpot are tremendously long and a friend of mine calculated that if you played the game for an infinite length of time, statistically you would only win around 43p for every pound spent. There are those who will become incredibly rich as a result of putting on a few quid but winning millions of pounds would not necessarily improve your life, as I'm sure certain factory workers from Blackburn would agree.



Fancy sticking a quid on these numbers, as predicted by Lottery Winner?



Entering past results into Lottery Winner is a quick and painless exercise thanks to the friendly editor

Anyway, unsurprisingly, since the endlessly hyped TV launch, there have been a steady stream of computer programs produced aimed at helping the average individual win huge quantities of cash. Lottery Winner, which inexplicably seems to be an AGA release, is among the best I've seen.

Winning numbers can be entered each week and Lottery Winner will attempt to analyse trends. It can then suggest numbers which come up most frequently, those which haven't come up for a while and might therefore be worth covering, or random numbers if you need a little inspiration.

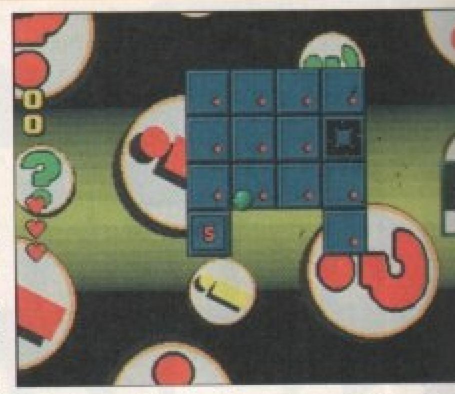
Whether it all works is another matter, and since I make a point of avoiding anything to do with the Lottery whenever I can, I am not really in a position to comment on its effectiveness. However, the author has based Lottery Winner on his earlier pools prediction program which has apparently helped several people win big prizes, so armchair gamblers everywhere might fancy a look.

Lottery Winner requires a 1 Meg machine to run. This version is unable to save results' databases to disk or print out predictions, but an upgraded version called Lottery Master is available from the author for just £2.50 and includes an up-to-date results database.

Touch 'n' Go

Programmed by: Alan Carter

Available from: F1 Licenceware
Disk No. F1-019



Lovely graphics are complemented by some excellent parallax scrolling in Touch'n'Go

All the best puzzle games are based on a simple idea, and Touch 'n' Go is no exception. You guide a ball through ten stages, each consisting of ten levels, with passwords being given after each stage.

Levels are composed of grids of squares and you must roll the ball across the squares to the exit. However, the exit only opens up after all the squares have vanished.

The squares are marked with coloured dots, either red, yellow or blue, and vanish respectively one, two or three seconds after they are touched. Touch the wrong square

Obstickle

Programmed by: Malcolm Lavery

Available from: Malcolm Lavery

Admittedly, Christmas has long since passed but that's no reason to overlook this festive little platform treat. In Obstickle you play the part of Bert the Christmas tree bauble, brought to life by the fairy on the tree top to hunt out sweets and presents for some nice kids with skint parents. Alright, so the storyline might not be up to much – after all, the kids would probably be expecting turbo ninja death monkeys – but that's no reason why you shouldn't appreciate this highly enjoyable offering.

Bert bounces around the colourful

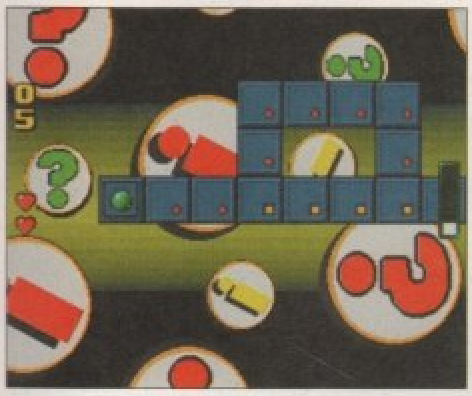


Nice graphics and nice gameplay make playing Obstickle a thoroughly pleasurable experience



A Zeppelin-like airship deposits you at the start of each level in Obstickle

GAME of the MONTH



This level looks simple... until you realise that the joystick controls are reversed

or take a wrong turn and you could find yourself sitting on a square as it vanishes, whereupon you will plummet into the dark depths below.

To add to the pressure, each level must also be completed within a strict time limit. The result is a worryingly addictive puzzler where quick thinking and planning ahead are essential. Good graphics and sound help to make the game instantly appealing, but once you've started playing it's the playability which keeps you coming back for more.

The best bit is yet to come though. With most commercial offerings you might expect to get a penny change from two tenners and a fiver, but with Touch 'n' Go you'd get two tens and a pound coin more.

screen to the accompaniment of numerous silly sound effects, avoiding assorted nasties along the way. Pulling down on the joystick when Bert is falling to the ground causes the resulting bounce to be higher, and pulling down while rising deadens the bounce slightly. Controlling Bert may take some getting used to, but this is all part of the playing experience.

Once you have completed a level a password is displayed so that later on you can leap straight in wherever you left off. The public domain demo version has 15 levels but the registered version, available for £5 from the author, has plenty more and there is actually a level designer supplied with the game so if you get the urge you can create your own.

Presentation throughout is excellent, and there are plenty of pleasing touches. Even the music is interesting, being a sort of Christmas medley featuring jazzed-up versions of carols including God Rest Ye Merry Gentlemen and We Three Kings.

It's guaranteed to bring back memories of after-dinner Trivial Pursuits with Aunty Flo. The only disappointing aspect of the game is the presence of numerous spelling mistakes in the on-screen telling of the story. Still, this is but a small criticism of an impressive and very enjoyable platformer.

Calling all PD libraries...

...and individuals with absolutely any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable public domain, shareware or licenceware, if it's of sufficient quality to merit coverage then stick it in a jiffy bag or padded envelope and send it in with all haste. I promise I'll at least look at your work. Please clearly label the disk, and include a cover letter supplying a description of the disk contents and some basic instructions. The address to send the disks to is:

Dave Cusick
PD submissions
Amiga Computing
Media House
Adlington Park
Macclesfield SK10 4NP

Touch Typing Tutor 2

Programmed by: Eddie Dewhurst
Available from: Central Licenceware Register

Being able to touch type quickly is an extremely useful skill to possess, since not only is it essential for some jobs but it also speeds up numerous computer-related tasks. It's perfectly possible to become a swift and accurate typist simply through practice, but for some time now there have been programs designed to speed the learning process and this is one of the best to date.



After a drill Touch Typing Tutor presents graphical analyses of your performances to date. That wasn't too bad an effort considering I had to stop halfway through for a screen grab...

On offer are a range of specialised drills in which simple non-sensical combinations of a few letters must be entered, as well as more sophisticated chunks of text for the more experienced typist. An on-screen representation of the keyboard uses colours to teach the correct fingering.

When the drill is finished, it is possible to compare what you should have been typing to what you actually did type. Speed and accuracy are displayed graphically and can be compared to the results of previous lessons. It is also possible to determine which letters cause the most trouble so that this can be addressed through the appropriate drills.

Once you've made your way through the selection of drills included, the program can still prove useful because ASCII text files can be loaded in for use as practice texts, so even the more experienced ➤

The Ultimate Quiz

Programmed by: Andy Gibson
Available from: F1 Licenceware
Disk No. F1-060

The Ultimate Quiz is one step ahead of the quiz game crowd thanks to two factors: It is not only attractively presented but also boasts a whopping 1000 questions covering ten different categories ranging from General Knowledge and Pop Music to Red Dwarf, Star Trek and Dr Who.

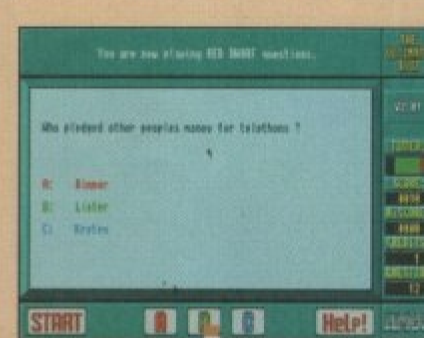
The player receives three credits at the start of play and must answer as many multiple-choice questions as possible, each under a strict time limit. Correct answers score points while incorrect responses mean a credit is deducted. Once you're out of credits that's it, and you'll have to see whether your score was good enough to set a new record for the subject you chose.

The difficulty level varies from very simple to horrendously challenging and because there are 100 questions on each subject, there isn't a problem with question repetition through repeated play. The only real complaint is that there aren't many questions that can be answered by somebody without specialist knowledge of a certain science fiction TV series, but the author and friends are apparently already at work on a data disk featuring hundreds of new questions.

Owners of 1 Meg Amigas in search of a stimulating jaunt through the less frequently accessed recesses of their minds will find this a hugely entertaining game.



I had thought I knew a reasonable amount about Pop Music until I came up against The Ultimate Quiz



Finally I seem to have found a quiz subject I can handle

typist can make use of TTT2 to maintain a high typing speed. In all, this is an extremely polished and useful program which should be of interest to computer users everywhere.

Star Trek Themes

Programmed by:

Available from: OnLine PD
Disk Nos OM45 A & B

Trekkies never cease to amaze, revelling in anything and everything related in some way to their favourite TV series. As a consequence, this disk will probably prove extremely popular despite the fact that it is really totally useless. Basically, its whole purpose in life is to play back two huge samples, one of which is the theme tune to the original Star Trek with the second being the theme to the more recent Star Trek: The Next Generation.

The samples themselves are not of exceptional quality but considering their length this is not surprising. A few options are on offer, some of which are as exciting as 'loop' whereby one theme somewhat predictably loops endlessly, and 'loop both' in which one theme tune follows directly on from the other, and continues, erm, endlessly.

The interface is reasonably attractive and what STT does, it does well. While you are listening to the themes, the program can display 3D starfields or a selection of pictures from the series. The only question is... what's the point?



It may not look like much, and indeed it may not do much, but Trekkies everywhere will love the Star Trek Themes player



A handy Star Trek who's who for anybody who happens to have been living in outer space for the past twenty something years

TurboCat

Programmed by: David Hill

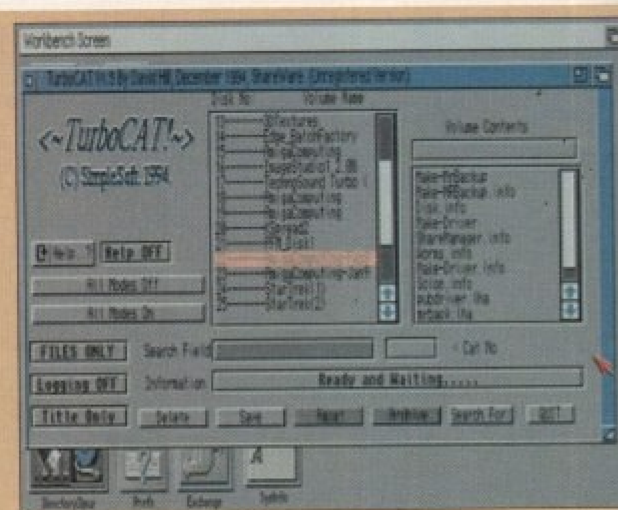
Available from: David Hill

One of the inescapable realities of computer life is that rarely used programs get stuck on floppy disks in a drawer or box somewhere, and as a result you are never able to find a particular program when you need it. Fortunately, the answer could be here in the form of TurboCat which is designed to be a fast and effective way to build up an index of exactly which programs are on which disks in your collection.

Adding a disk to the database is as simple as inserting it into the drive. TurboCat scans its contents and adds it to its records. Once the database is in place you can perform searches by entering the name of the disk you think the desired program is on. You can then view the disk contents on screen. Unfortunately, it does not appear possible to enter the name of the actual program you desire, so the process is not as quick as it might be.

TurboCat runs on machines with WB 2 or later, and goes some way towards employing the standard intuition interface. Aspects of the interface seem a little peculiar, however it's possible to click on areas of the window and change the writing in text gadgets but the program often seems to take no notice of this.

This is still a potentially useful program and while at the moment it seems slightly flawed, with time TurboCat could become a polished and effective program. There is a demo version available in the public domain which limits the number of disk entries to 200, but for £5 a registered version is available from the author, with this limitation removed and some enhanced features implemented.



TurboCat is quick and easy to use, if a little lacking in features

Captain Carnage

Programmed by: Dan Reynolds

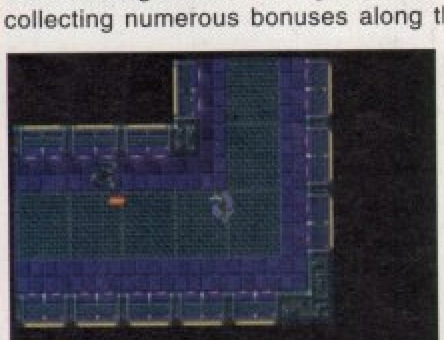
Available from: F1 Licenceware
Disk No. F1-061

Take on the role of Captain Carnage the Cosmic Commando in this unashamed Alien Breed clone. The enormous success of that classic is testament to the popularity of the simple but enjoyable gameplay and the frenetic blasting action on offer here.

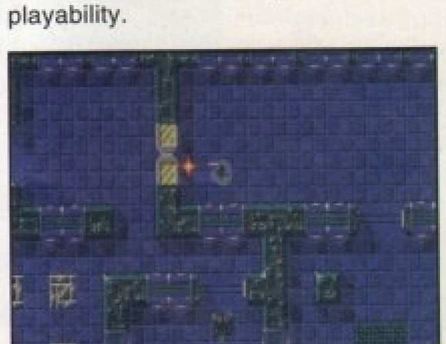
As the eponymous Captain you must explore three vast scrolling levels, blasting anything that moves and collecting numerous bonuses along the way. There are computer terminals (running WB 9.x!) which can be accessed, enabling you to purchase accessories and improved weaponry. The dangerous aliens are everywhere, so collecting plenty of money to spend at these terminals is vital.

Your ultimate objective is to rise from the rank of Captain to Star Marshall, but this isn't something that you'll achieve too quickly because the game really is large. Certain parts of the levels can only be reached by using keys to open doors, so once more the terminals become critical points to call in at.

There's plenty here for shoot-'em-up fans of all abilities. What Captain Carnage lacks in originality is more than made up for in terms of it's sheer playability.



Pure blasting fun for everyone with the highly unoriginal Captain Carnage



Judicious use of door keys is essential if you are ever to negotiate an entire level

lay your hands on me

OnLine PD
1 The Cloisters, Halsall Lane, Formby, Liverpool L37 3PX
(Tel: 01704 834335)

Malcolm Lavery
20 Shakespeare Avenue, Orgill, Egremont, Cumbria CA22 2HF

F1 Licenceware
31 Wellington Road, Exeter, Devon EX2 9DU
(Tel: 0392 493580)

David Hill
165 Owen Avenue, The Murray, East Kilbride, Glasgow G75 9AQ

CLR software
Available from various libraries including
17 Bit Software
1st Floor Offices, 2/8 Market Street, Wakefield, West Yorks WF1 1DH
(Tel: 01924 336982)

amiga update

The fax of life

Stevie Kennedy talks to the world with GPFax, the ultimate in fax packages

If you thought the Amiga was falling behind other platforms in terms of business software, then think again. The Microsofts and Lotuses of this world may have ignored the Amiga to concentrate on the Mac and PC, but that's their loss, not ours. If you've ever used the pernickity and grouchy Microsoft Word on a PC, you'll know what I mean.

Fax software is one area in which the Amiga is very well served, and though there are only a few commercial packages available, those that are on the shelves are good enough to hold their own against any competition. GPFax, one of the best of its kind on the Amiga, is easily as good as packages on the PC such as ExpressFax and Delrina's WinFax Pro when it comes to smooth, easy, and efficient use – even if not in terms of the number of daft extra features it boasts.

The latest version 2.347 of the package (whatever happened to good old 2.346?) looks pretty much the same as previous incarnations, but a number of important omissions have been made good and a few annoying bugs sorted out. With its neat, tidy control screen and incredibly intuitive approach to the job, GPFax is one of those rare programs (rare on other platforms at least) which can be used with hardly a glance at the comprehensive manual.

The first major improvement is that Class 1 and Class 2 software can now be installed from the same archive using a simple installer program rather than the separate versions available before now. This is good news for all those owners of Supra Class 2 faxmodems, such as the Supra Plus range. Setting the exact modem type, if you don't want to use generic settings, is a simple matter of changing the program's icon tool type to one of the directly supported makes, such as Supra, Zyxel, Avtek, or Practical Peripherals.

A number of tiddly, but irritating bugs have also been ironed out on the Class 2 side of things, including the error which caused pages to finish before their time on a redial attempt. None of the bugs were particularly severe, but clearing them up makes for a smoother, more reliable program which shouldn't have difficulties with most fax machines.

IMPROVEMENT

The data modem side has seen one annoying glitch removed in that the older versions sometimes failed to report the connection baud rate speed when dialling a BBS. This can be a real problem if you think you're connected at 14,400 baud, but the modem has sneakily connected at 9600 without telling you. No more of that malarkey, my lad!

A new ARexx command takes care of the problem, illustrating once again what a wonderfully powerful and flexible tool ARexx really is. Pity they haven't got it on the PC or Mac, isn't it?

The only complaint I still have concerning the program is that the fax printer driver, which can trap the output from most DTP or word processor packages and automatically convert it to a fax, will only work while the main GPFax program is running. A standalone printer driver which activated the GPFax software and asked for a telephone number before sending the fax in the background would be an easier and more elegant solution, but this isn't a serious fault.

Small businesses, particularly those working from home with only one phone line and no desire to spend £300 on a fax machine, are urged to give this one a try. You won't be disappointed.

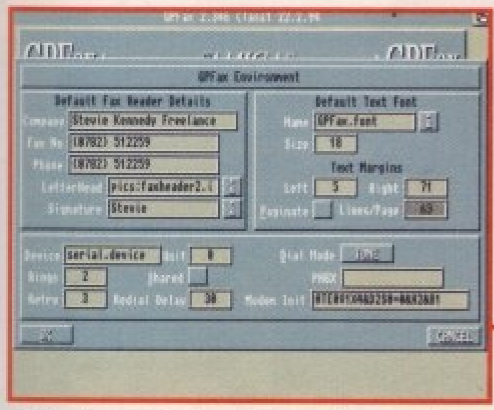
Easy life

For those of you who haven't seen previous reviews of GPFax, it is a program which uses a simple front-end to make the creation and sending of faxes as easy as possible. Scheduling (automatically sending faxes to a list of numbers at specified times) is very easy, and the user can create custom IFF fax headers for inclusion in the document.

The bottom line

Product: GPFax
Supplier: Wizard Developments
Price: £39.99
Tel: 0322 277 908

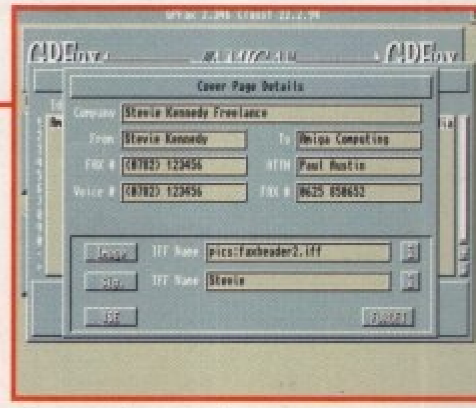
Ease of use	**10**
Implementation	**9**
Value for money	**9**
Overall	**9**



GPFax has a simple environment screen for setting up the most important preferences, such as the default fax header and the font used for body text



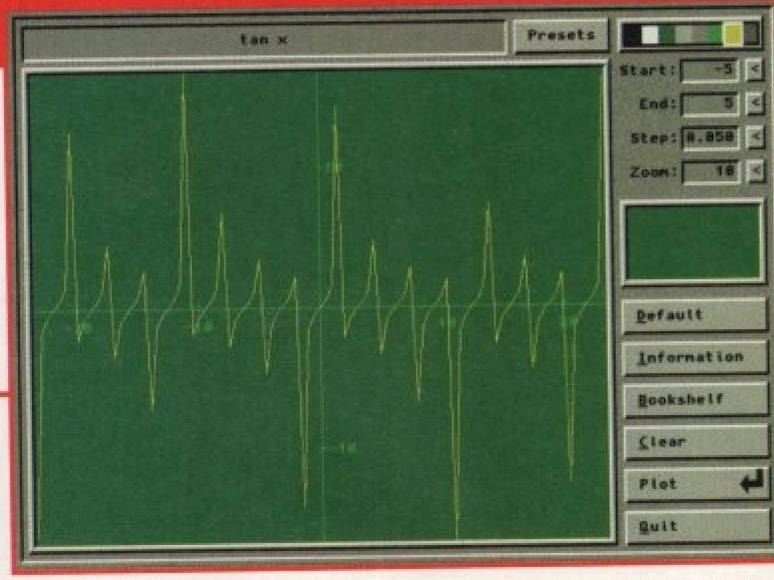
Using a simple IFF brush and the GPFax default font, creating and sending respectable-looking faxes is quick and easy



Cover pages, sometimes monstrously complex on PC fax packages, are a doddle to attach and send

In control

The latest update of Helm, the multimedia authoring package that puts you in charge of your Amiga



Complex maths functions are included for the more adventurous, which makes this particular book a great cheating aid for A Level maths students

For some reason, Eagle Tree Software decided to call their multimedia authoring package 'Helm' and use the motif of a yacht to promote the product, though what this program has to do with boats and rudders is beyond me. Still, you shouldn't argue with a company based in Virginia in case they send Doug McClure to sort you out (hands up all the old fogies who got that one).

Sitting nicely between CanDo and Hyperbook, Helm offers an interface superior to Hyperbook's old-fashioned attempt, and power to match anything CanDo can throw at it without the need to scatter resource files all over your hard drive. In its original state, which you might have savoured on our July 1994 (issue 75) CoverDisk, Helm was a good choice for the non-programmer looking to make use of the Amiga's operating system without learning C, and with a few tweaks and bit of bug-bashing it's looking better all the time.

As with the other authoring packages, Helm has a distinctive graphical front-end which multitasks with Workbench, and organises its projects in books and pages. Each page can be constructed exactly as the user wishes to include text, images, buttons, effect areas, and so on. Objects can be set to carry out a wide variety of actions, including everything from running an outside AmigaDOS or ARexx command to making use of the program's many internal resources.

This means that users can quickly set up pages to do just about anything, and as the form (basic layout and screen format) of a page can be copied to any new page, it is easy to add pages until the book is complete. A 220-page manual split into 36 chapters covering quick start, editing, reference, and command syntax gives the complete beginner plenty of help.

CHANGES

In this latest version (1.65) there are quite a few changes, though most of them address shortcomings in earlier releases. One important change is that on-screen text, particularly in hi-res interlace mode, is smoother and faster where before it was annoyingly slow to update, but this is just one of several updates.

Creating complex pages with lots of brushes and objects was made more of a hassle by the program's insistence on refreshing the complete screen when an object was pasted into place. That has now been fixed, and in addition the pasted object remains highlighted to make rapid placement of several similar objects much easier.

Printing, not one of Helm's more developed skills, is improved by the removal of the tool window from printed output, and colour fonts can at last be used without the glitches which stopped them being displayed properly on screen. Lovers of KaraFonts can now use their marble and chrome fonts to good effect without ending up with a colour catastrophe.

Numerous bugs in the program's command language, some more major than others, have also been fixed and a few more commands added, such as the drawstyle command, which enhance the package's use of imported fonts. Fixing the bugs in HelmBrowser which caused the odd crash is possibly the most welcome fix, but one new feature which makes page editing a little easier is the Select Layer menu command.

When a Helm page is set up, the objects added to it are arranged in 'layers', and by choosing the new menu option the user can open a window containing a list of the objects on the page. Jumping to the correct one is a lot easier, and makes de-bugging a new book much easier. AC

No more hassles

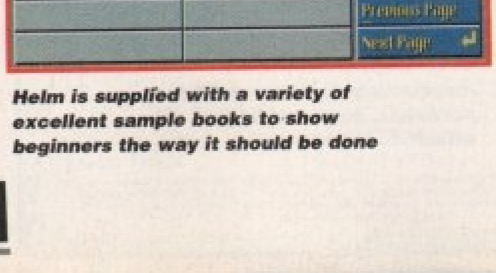
Gradually bedded in and updated over the past 18 months, Helm is now a much more stable and usable package than it was when it first appeared. If you have tried Hyperbook or our Helm Lite CoverDisk and liked the way that a little bit of effort could be made to stretch a long way, this latest version of the package should meet with your approval.

There are still plenty of things you can't do with Helm, and I would have liked the opportunity to use more Workbench-standard gadgets, but for programming without the coding hassles, you can't do much better. CanDo is probably still a better bet for general use – particularly if you want to create a utility which runs on Workbench over an ARexx engine, but Helm should stand pretty well on its own.

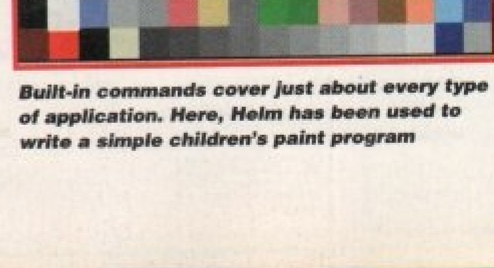
The bottom line

Product: Helm
Supplier: Eureka
Price: £99.95
Phone: 010 314637 0800

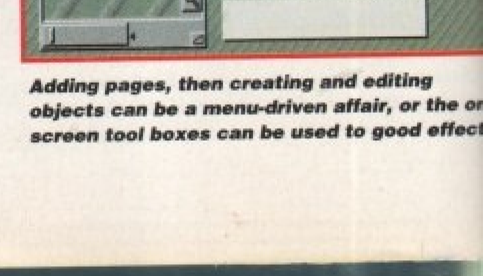
Ease of use	**8**
Implementation	**7**
Value for money	**8**
Overall	**8**



Helm is supplied with a variety of excellent sample books to show beginners the way it should be done



Built-in commands cover just about every type of application. Here, Helm has been used to write a simple children's paint program



Adding pages, then creating and editing objects can be a menu-driven affair, or the on screen tool boxes can be used to good effect

Weird Science

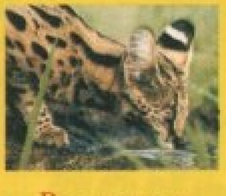
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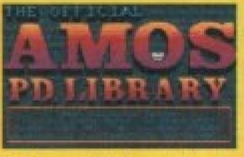
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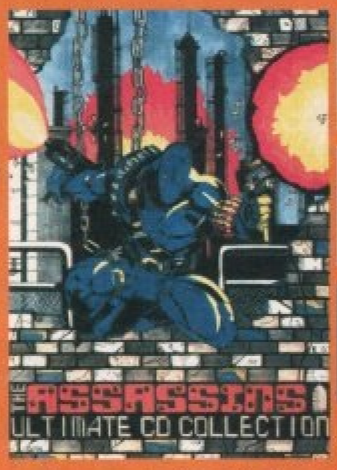
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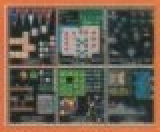
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Video DAC 18 – AGA for all..

Paul Austin previews an amazing little black magic box that allows any Amiga to display graphics in a quarter of a million colours

Back in the days before AGA, the only way to see more than 4096 colour images on your Amiga meant a massive investment in a dedicated 24-bit graphics card. Even if you could afford the investment you still needed a machine capable of accommodating a zorro card. In other words an A1500, 2000 or 3000-only club.

Finally a solution arrived in the form of the DCTV. Now, anyone with the will could play a part in the 24-bit revolution. Unfortunately, to do so meant handing over around £350 – a figure which has diminished little over the years.

OK, there you have it, a well supported and well implemented 24-bit solution – but perhaps still a little pricey for some. Fortunately, there's now an affordable alternative in the form of the Video DAC 18.

Although lacking some of the finer points of the DCTV system, this latest Italian import does offer some very appealing assets, not least of which is a bargain basement price.

Although the kit on test lacks English documentation, basic setup is extremely straightforward. Like its predecessor, the actual card simply plugs in the RGB port – no other connections required.

Once installed you simply reconnect your monitor to the provided through port and you're in business. The next step is to run the accompanying software either direct from the floppy or via the hard drive.

To start you off, a small selection of demo images have been provided to fine tune the system. Again, the DAC 18 follows in the DCTV tradition with two small adjusters built directly onto the unit. Although the card is pre-calibrated, some machines may require a little added tweaking.

The word calibration may sound a little ominous but the process simply involves loading up a demo image, followed by a quick twiddle with a screw driver until the perfect image pops on screen. Once you're happy the little black box can be left alone, soon to be forgotten. In fact the entire system becomes completely invisible when you're using normal Amiga displays.

TRANSPARENT

Only when you display a DAC image will the card leap into life, the only limitation being that DAC images must be either 320 x 256, 320 x 512 or 384 x 576.

In other words, Lo-res with or without interlace and overscan. In fact the card is so transparent you can even use digitisers or genlocks as before, the only difference being that now you have a quarter of a million colours to play with.

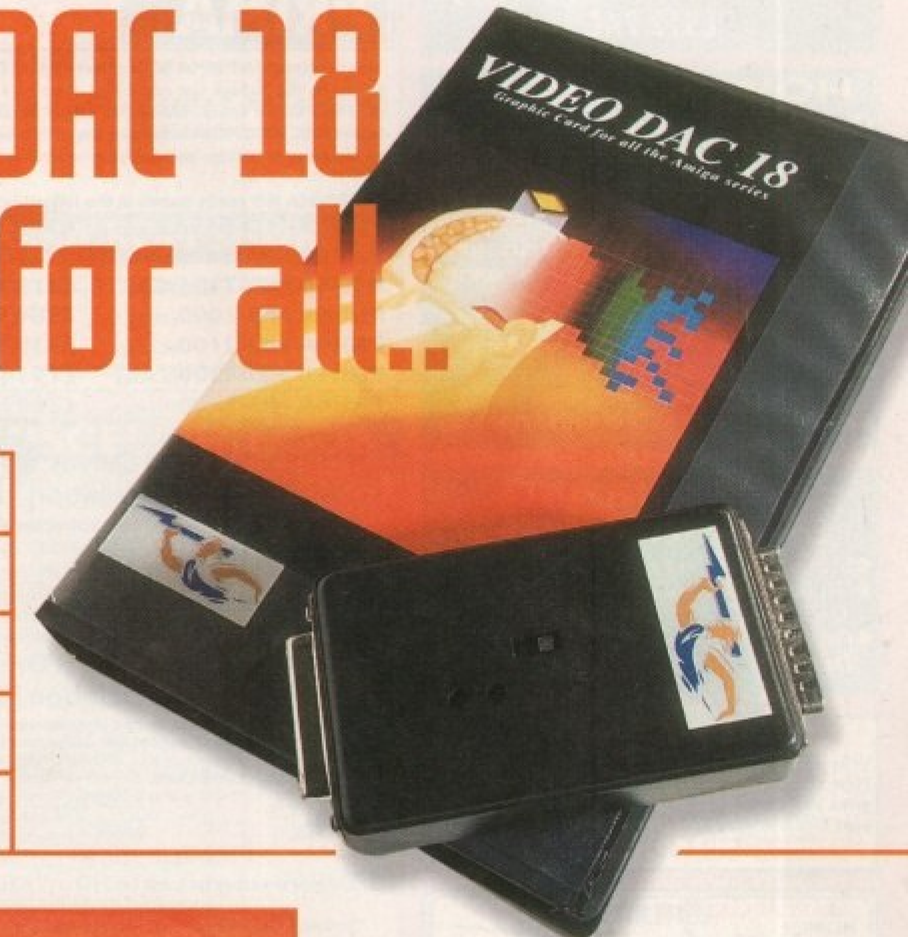
As you've probably already gathered, the DAC 18 employs its own proprietary file format and again, like the DCTV, this offers a sizeable saving in storage space.

On average, an identical DAC image will occupy roughly one third of the space required by a 24-bit IFF. Although this doesn't match the massive saving offered by a similar DCTV file it's still fairly significant. As mentioned earlier, the DAC system ships with a small selection of support software. Aside from a small toggle program to actually activate the DAC hardware, you're also provided with a workbench display tool which will load and display any existing DAC image.

However, the key to the system lurks within the Video_DAC_18 conversion software. It's from here that all the DAC images start their colourful lives. At its most basic level the software allows you to load any 24-bit IFF image – of the correct resolution – after which it's automatically converted into a DAC file and displayed on screen using up to 262,144 colours.

In addition to simply loading 24-bit images and saving DAC files, the software also provides batch conversion of both individual files and entire animations.

Unfortunately, this side of the software does need a little more attention. However, in principle it should allow you to batch process a series of files or convert a complete sequence into a DAC anim.

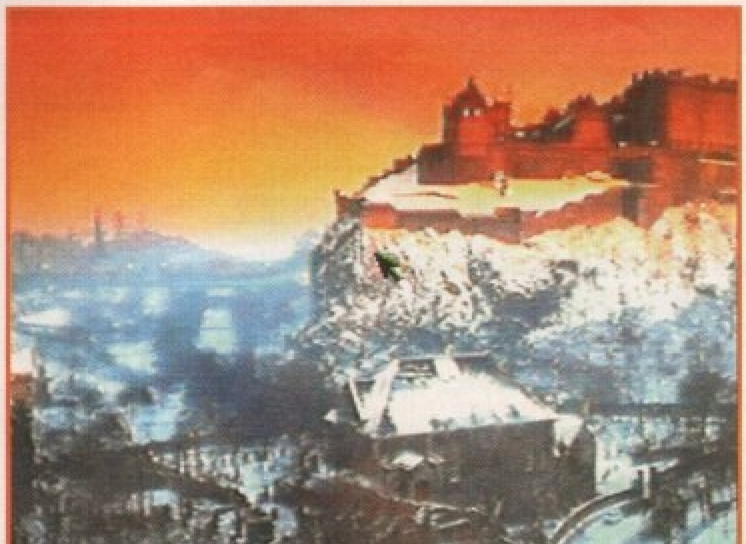


End result

Although still in its early stages, the DAC system shows real potential. My only reservation is how well it will be received by the rest of the industry. If the DAC format becomes as well supported as its DCTV counterpart, Power Computing could have a real money spinner on their hands.

What's required is an ADPro and imageFX saver plus some direct support from some well established ray tracing and modelling programs. The only downside of the DAC system is that until it becomes common place, your creations could well become marooned on one of the few DAC-equipped machines.

But at this price point I can image many Amiga fans seeing this as a risk well worth taking. In short, hold back if you're not completely sure, and keep a close eye on the news and update columns for more info on what could generate renaissance for ageing Amigas everywhere.



An impressive example of Video DAC in action. Ham 8 emulation made easy, even down to the Ham fringing on the mouse pointer

The bottom line

Product: Video DAC 18
Supplier: Power Computing
Price: £39.95
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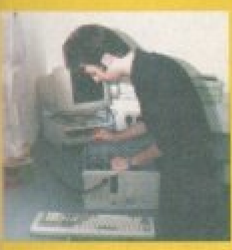
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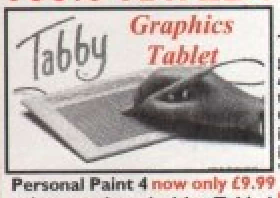
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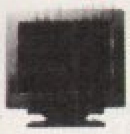
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Note the sleek curves and ergonomic brick-like design of the Communicator III hardware... well, perhaps a little exaggeration. A worthy mention must go to the midi port, built in so that it can be used by either the CD32 or Amiga

The Communicator system for the CD32 has gone through two facelifts since its first release. Version three has just appeared and Adam Phillips takes it in hand to give it a good going over

Multiple

Definition of multimedia?.. err. A package that defines the term?... umm. Never mind. Judging from some companies' and magazines' exclamations of this, the next generation in information technology, no one, it would appear, would really know what the term exactly means.

It's a great tag line to sell computers to unsuspecting families and businesses but the end result is still by no means defined. Perhaps it should be called multiple media at the moment, and if there's one machine that can carve out a true definition through its excellent audio, video and graphic capabilities, it's the Amiga.

While there may be no bold claims of multimedia on the Communicator III's packaging, some would see it as a piece of hardware and software designed to aid in 'multimedia' presentations. For all the hooked readers out there, the first stumbling block to owning the Communicator III is the necessity to have a CD32 and an Amiga, as well as a minimum of 1Mb Chipram and one megabyte of RAM.

The hardware itself is as aesthetically pleasing to look at as Auntie Nelly in Eastenders, with its cumbersome design and freakish angles normally associated with a ship out of Blake's Seven. The unit is plugged into the side of the CD32 via the serial port. The actual connector is a rather flimsy number, so make sure you don't happen to nudge it by accident.

ATTACHMENTS

A lead provided with the package allows the CD32 to then be attached to the Amiga. Following this, it's a simple case of installing the software which is made up of the Commbook and a selection of PD programs.

Included in the pack are two CDs for the discerning user – one contains the CD32 main program and the second, Photolite+. By booting the two machines up and running them on the same baud rate – a very simple task – the user has a variety of options available to him.

Through the Amiga-based interface it's possible to control the CD32. The main set of icons running along the bottom of the screen operate the presentation program, the audio and FMV control page, a file transfer option, and a file transfer option to upload GIF or IFF files to the CD32 for viewing and finally, the baud rate setting panel. The presentation program provided is really rather poor with a limited array of wipes, dissolves and other jerky special effects. Fonts are limited and while FMV (if you actually have the unavailable card) and CD audio can be played from the CD32, the controls for setting up the beginning and end points again aren't entirely assured.

Another annoying oversight is the CD counter. To set the point for when you want the track to end is a bit of a pain. The counter is preset at 99 tracks, 69 minutes and 69 seconds. Instead of simply clicking on forwards and looping back to zero, the user has to plough all the way back to the beginning using the track and minute counters. It's not a major problem but frustrating all the same.

In all honesty, other than for perhaps schoolwork, if you want your work to shine professionally, Scala really is an absolute must to realise the full potential of this system – as it stands, the Commbook program presentation facilities just aren't up to scratch. If you already have a copy of Scala installed then you'll still have to buy the appropriate driver from Scala to run the CD32 via the package.

The Files option is fine up to a point. Reading the instructions gives a definite impression that one is able to download files from the CD32, such as picture files (that much is true), put them in the directory of choice via the Settings screen and/or select to view them on the CD32's screen. As for viewing, there was no such luck because when I tried to call up a piccy, I couldn't for the life of me get it to work.



The CD32 communications screen allows a variety of options for the multiple media user

A future winner

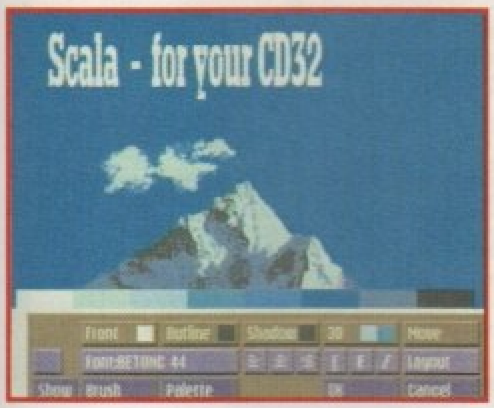
There's great potential in this package and, as far as I can see, it's not being exploited to the full with its dodgy operating system. I have been informed by Eureka that any problems are being sorted out for the official release, so the scores listed below would each gain an additional mark once these improvements have been made.

When Eureka get the formula right, they'll be onto a winner. At the moment this comes in at second place.

Next, the View option is used to transfer picture and other files to the CD32 for display purposes – very useful for non-AGA Amiga owners who want to see the best in graphics quality.

Finally, there is the Settings screen where baud rates can be altered and the connection between the two machines can be tested. On a basic A500 or A2000 you can expect a baud rate around 9600, on an A1200, 3000 and 4000, higher speeds are possible.

On the CD32 side, there are a few commercial and several PD programs for the user to dabble with. Photolite comes free with the Communicator and enables Photo CDs to be slipped in and displayed. Images can be carouselled and flipped in to either portrait or landscape modes, and there are a host of other options available.



You'll have to pay for the program and the driver but Scala is the best 'multimedia' package around and well worth the investment

Like the Scala option, you're going to need to buy Mediapoint separately to use the Communicator's options for it. The program allows full control over Mpeg and audio CDs and slow motion and more can be programmed in to aid multiple media presentations.

BOOT-UP

One of the features that Eureka are most proud of is the Virtual CD option. When selected on a particular program from the CD32's list of programs, instead of booting up with the main interface screen each time, the virtual CDed prog is booted up automatically – handy and time saving for setting the CD32 up as a normal CD-ROM for the Amiga.

As a basic idea, the Communicator is excellent in theory, allowing what would appear to be a healthy amount of tricks and tactics for getting the most out of the Amiga and the CD32. Unfortunately, there are too many hiccups in the software side of things, with programs inexplicably crashing from time to time. I think some problems are down to the rather inadequate instructions provided with the machine as well.

Also, everything is just so slow and fiddley at times on the A1200. I also found that the system would sometimes crash, there were long waits as the CD loaded in a program, and options were selected from one machine and shown on the other.

These kind of delays should be expected but at the end of the day, when you're not sure you're going to get the desired result anyway, it's all just a tad frustrating to say the least.

Finally, you'll have to spend more money honing the Communicator III into the desired product you want in terms of what it's capable of. That may mean paying out for a copy of Scala or buying an FMV cartridge when they become available. Only then do I think that the real power of this system will become apparent.

A fistful of programs

Also provided with the Communicator III are a set of PD/Shareware programs to aid the system. What follows is the briefest of rundowns on a few of the included titles.

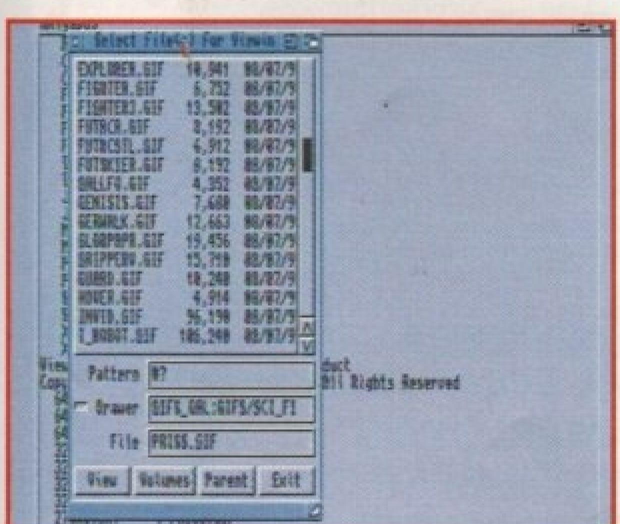
Twin Express – This shareware utility is a file transfer program that allows the user to quickly exchange files between two computers. In this case, the Amiga and CD32 via the serial ports of the respective machines.

With the emphasis being on speed, the package is six-seven times quicker than the serial handler used by AmigaDOS. Also, if you should happen to have a PC lying round the house then Twin Express can move files between the Amiga and itself, as well as translating any differences found between the differing formats.

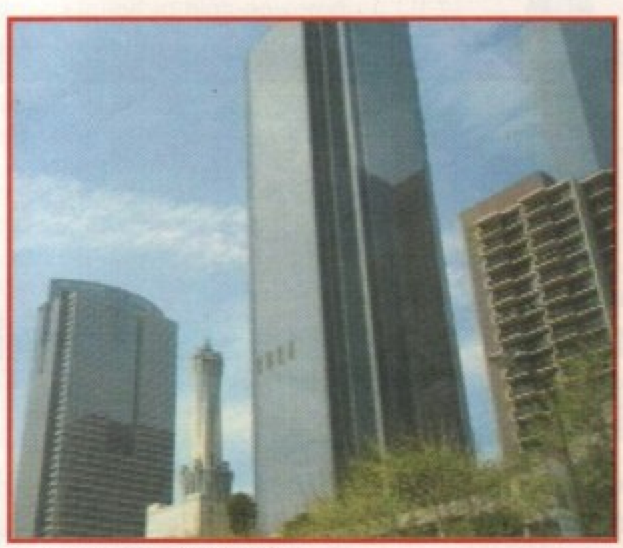
Sernet – This highly useful piece of software turns that games machine lying next to the family television into a CD-ROM drive with full icon and Workbench support. The only real problem is the baud rate which is limited because the CD32 is connected via the serial port. For the pure faster transfers, it's best to use Twin Express.

Viewtek – A highly useful little program that boasts a large array of differing picture and animation formats to view your own and other people's work with. An A2000, 3000 or 4000 keyboard can be plugged into the Communicator to make life easier. I'd also recommend another mouse which makes life quicker and easier for selecting any items or programs in the CD32's Workbench.

media



Load in Viewtek via the CD32, slap in a keyboard for ease of use and load in a picture...



... in this case a GIF from the CD collection GIFS Galore

The bottom line

Product: Communicator III
Price: £69.99 inc VAT
Supplier: Eureka
Telephone: 010 314 637 0800

Ease of use	**7**
Implementation	**6**
Value for money	**7**
Overall	**7**

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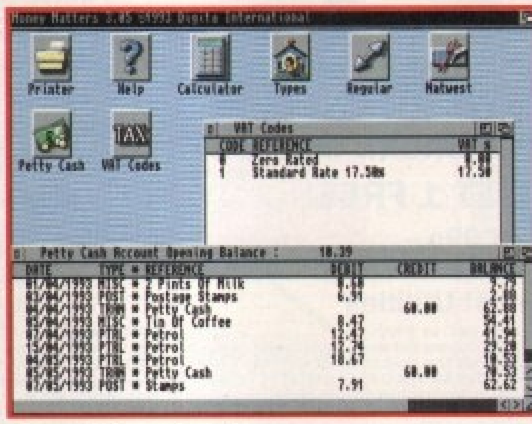
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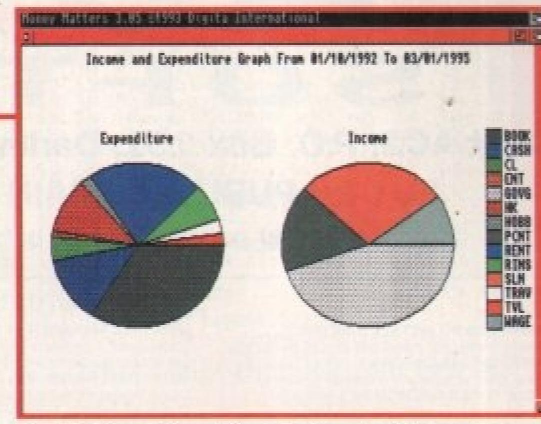
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Colourful icons give the user access to less visually appealing tables



See just how big a slice the despised Tax man is taking using one of numerous chart options

Thrifty digits

Not many chores fill reviewer Gareth Lofthouse with more dread than working out his own finances. This month we see if Digita's Money Matters can help to ease the pain.

Few things can be more daunting than the prospect of having to work out home accounts. If you're anything like me, gathering the bills and bank statements together only serves to confirm your worst fears about last month's expenditure. A program that just flashed the words 'Stoney Broke' would be as accurate as anything else.

Still, those of you who have either more resources or more financial restraint than I may be interested in the latest version of Money Matters. The makers, best known for their exemplary Wordworth WP package, claim it's the ideal money manager for the home or small business.

Money Matters differs from other Amiga finance programs in that it is not a spreadsheet analyser. It's clearly aimed at users who want simplicity and clarity above anything else, so things rarely get more complex than the average bank statement.

Considering its target audience it has many strengths. Current, credit card and saving accounts are kept track of simultaneously within the program, and transfers and transactions are easily undertaken.

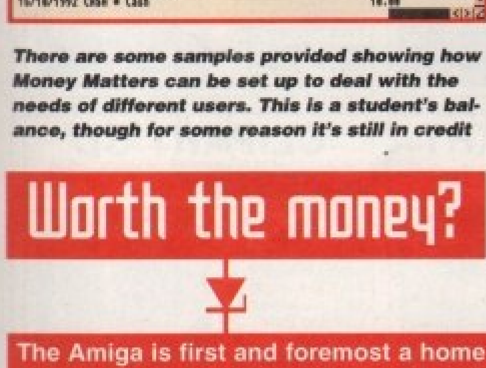
When you enter a new account's details there is an option to activate minimum and maximum cash margins. This means that the program can automatically warn you if you exceed an overdraft limit or tell you when you should transfer money to a savings account.

A time-saving feature lies in the fact that regular transactions can be processed automatically. Direct debits are therefore calculated at the appropriate times of the year without the user having to do anything further.

Each outgoing and incoming for an account is easily identifiable because you can give it a 'type' code. Every time money is paid for car insurance, for example, it will be clearly entered on the transaction record as CARI.

Users can give their finances a visual breakdown using the extensive charting options. Colour pie charts or bar tables can give you a more concrete idea of where your money is going than rows of figures set in black and white.

Digita have a good reputation for providing their customers with quality explanatory material, and Money Matters maintains the high standard. There's a comprehensive manual with step-by-step tutorials padded out with some general advice on how to avoid debt and obtain credit.



There are some samples provided showing how Money Matters can be set up to deal with the needs of different users. This is a student's balance, though for some reason it's still in credit

HELPING HAND

The online help is in some respects better than that available on Wordworth, for the simple reason that topics have been arranged alphabetically. There's also an alternative method through which each menu command can be queried with a click of the mouse. On the downside, however, some of the explanations could be fuller.

Users can make financial projections into the future using the 'What If' command, a feature more usually found in high-powered spreadsheet packages. This is very handy if you want to assess the impact of various decisions on your cashflow.

For the small business concern, there are reports with a semi-professional style and VAT calculations. Transactions of particular significance can be given explanations using the notepad. As far as using the program goes, much is made of the software's Human Interface Protocol, but unfortunately this is one area where I felt Money Matters was let down. There are some well-drawn icons but otherwise the control system doesn't work as clearly and simply as Wordworth 3.1 SE.

Worth the money?

The Amiga is first and foremost a home computer, and Money Matters is much more appropriate for the average user than the high-powered spreadsheet analysers they might otherwise choose. It may not have the professionalism of TurboCalc, for example, but it caters better for what most people really need.

However, with an RRP of £50, I can't help feeling it's rather pricey considering how competitive the market is. After all, you can buy Mini Office which includes a spreadsheet program with five other utilities for £10 less. By their own standards, it doesn't have the consistently attractive interface that is the crowning point of Digita's budget wordprocessor. Overall, then, it's not the top-notch effort we might have hoped for, but it will prove itself very useful to its buyers nonetheless.

SYSTEM ESSENTIALS

RED = Essential **BLACK** = Recommended

2/3 Workbench

1 Mb Free memory

The bottom line

Product: Money Matters v3
Supplier: Digita International
Tel: 0395 270273
Price: £49.99

Ease of use	**8**
Implementation	**7**
Value for money	**7**
Overall	**7**

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(2D)	The Number of Disks
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(030)	Processor Needed
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U460 PAGESTREAM v3B/C PATCH [2 D]
You need this to upgrade from 3.0 to v3.0B then to v3.0C. After this purchase the D patch and so on.
U467 T. U.D. E. v1.0D
The Ultimate Degrader and Enchancer cam be used to degrade A1200's and upgrade an A500.
U471 P.F.S. v9.5 [WB2+]
PFS replaces your dos drivers and speeds upall disks access with your floppy drive.
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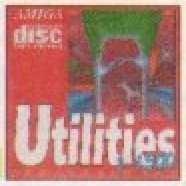
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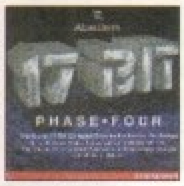


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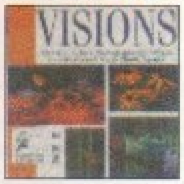


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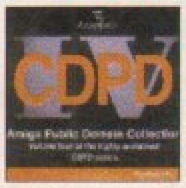
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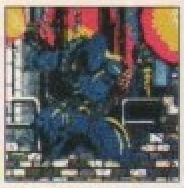
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D136 POLKA BROS. "GEVALIA" [1MB]
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wow! This is great and lasts for ages
D148 URBAN "SOME JUSTICE '94" AGA
this has a superb soundtrack. Must be heard!
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one of the best AGA demos this month
D160 OZONE "THE SWAMP THING"
D168 DUPLO "MY MAMMA IS A VAMPIRE" [2D] AGA
an excellent, very long demo from Duplo
D169 FREEZERS "WIT PREMIUM" AGA
The best AGA demo from November - get this!
D171 DREAM DEALERS "IMAGINE"
D172 SUBURBAN "LURKING SHADOWS" [2 DISKS]
pretty reasonable rave-type demo.
D174 MELON DESIGN "NINJA"
sort of a cartoon demo – watch the Ninja in action.
D175 SILENTS "SOUL KITCHEN" [020 A1200 ONLY]
brilliant!!! Great demo throughout [2 DISKS]
D176 TRSI "WE WILL SMASH YOU!"
TRSI demos used to be brilliant. This one is not bad.
D177 DIGITAL "ETERNAL MADNESS" [AGA] [2 DISKS]
released after the party, very nice! [1MB FAST RAM+]
D178 VIRTUAL DREAMS "PSYCHEDELIC" [AGA] [3 D]
voted 2nd at the party. Outstanding routines! [HD only]
D179 POLKA BROS. "THE PREY" [2 DISKS]
wow! The very best tunnel-sequence ever! Amazing.
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get this to see the 4096 colour "Rot-Zoomer"!
D181 DUPLO "MUCH ADO ABOUT NOTHING"
D182 DREAM DEALERS "TOOTHBRUSH" [2 DISKS]
not one of the best but verry funny.
D183 IMPACT "IN A WORLD OF ASCII"
very, very original! Buy it and be impressed!
D184 BALANCE "SUNTROME"
D185 POLKA BROS. "VISIONS IN BLUR" [4 DISKS]
loads of spot-on, great effects in this new demo!
D186 OXYGENE "INDIGO" [2 DISKS]
reasonable demo with a great tunnel sequence
D187 APEX "DOTSY"
D188 SANITY "ROOTS"
the routines in this are decent. Some nice effects.
D189 ANDROMEDA "NEXUS 7"
voted 1st at the Party 94! Absolute must!
D190 REBELS "WHAMMER SLAMMER" [AGA] [3 D]
Rebels produce superb demos! This is no exception!
D191 BOMB "MOTION ORIGIN 2" [AGA] [2 DISKS]
has the best Doom part ever! Irresistable demo!
D192 ASYLUM "ZEROS & ONES" [AGA]
quite a good, all round demo from these guys.

Games

GM22 MISSILES OVER XERION [2 DISKS]
excellent defender type game
GM41 TETRIS DUAL [AGA]
GM45 ROAD TO HELL [1.5MB RAM NEEDED]
a great racing game!
GM60 BAZZA AND RUNT AGA
wow! This platform game is a must!
GM67 BLACK DAWN IIGM76 SCRABBLE
GM78 STARWOIDS [1MB] [2 DISKS]
thrust and oids mixed - very addictive
*game*GM83 ZOMBI APOCALYPSE II
GM88 MONOPOLY v1
get this now! This is a superb 2 player game
GM97 TOP HAT WILLY
an Amiga "Jet Set Willy" rip-off. Addictive!
GM103 SUPER BATTLE ZONE
GM105 DYNAMITE WARRIORS 2
GM106 DELUXE GALAGA v2.4
latest version of the brilliant shoot-em-up
GM111 IN THE DEAD OF THE NIGHT [3 DISKS]
a decent game similar to "Wing Commander"
GM112 PUCMAN WORLDS
GM113 JINX [AGA] [2 DISKS]
excellent! A PD version of Streetfigher. Get this!
GM114 FLAMING ENGINES
GM115 POWER BATTLE
latest version of the brilliant shoot-em-up
GM116 DERRING DO
GM118 CHANEQUES [2 Disks]
yes, two please!! A Lemmings type game. Direct your little men (with different skills) to the end.
GM119 MR SHARK GOES RACING
an very decent super cars type racing game.
GM120 LANCE
one of the very few Amiga joust games!
GM121 HARRY HADDOCK
a colourful platform game similar to James Pond.
GM122 SUICIDE MACHINE
an "Operation Wolf" clone with cute graphics!
GM123 MEGABLOCK V2
one of the best Tetris games on the Amiga.
GM124 TOMCAT [AGA] [7 DISKS] [HARD DRIVE]
Full Motion Video game for all AGA Amigas.
GM125 KELLOGS LAND [AGA]
WOW! The very best PD platform game ever!
GM126 SUPER MEGA FRUITS
a good Fruit Machine game.
GM127 ZAXXON
superb! The C64 classic now comes to the Amiga!
GM128 ROCKETZ V2 [AGA]
spot on graphics and playability. 2 player thrust.
GM129 FEARS [AGA]
Doom on the Amiga! Miss this at your peril!!!
GM130 FISHY FISHY
eat the small fish, avoid the sharks and grow!
GM132 SAMURAI SHOWDOWN [AGA]
this is an amusing Street Fighter clone. Good!

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IM26 MISC TEXTURES
IM27 ORGANIC TEXTURES


IM02 BABYLON 5 OBJECTS


IM16 STAR WARS OBJECTS (3 DISKS)

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A disk that contains imagine docs, tips and loads of frequently asked questions!
only 99p!

BUDDY SYSTEM
A must for all Imagine users. Very helpful!
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IM20 STAR TREK OBJECTS (2 DISKS)

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These packs contain tons and tons of extra icons, drawers and backdrops for the excellent Magic Workbench (U352).

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Magic WB Extras Volume 2 (2 Disks)
Magic WB Extras Volume 3 (2 Disks)
Magic WB Extras Volume 4 (2 Disks)
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£1.98 per Pack or £9.49 for All 10 Disks!

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Anime Cards
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Disk Compressor is a new and powerful hard disk compressor for the Amiga. Firstly you run the easy-to-use installer routine. then, after installation, you access the Disk Compressor GUI and choose which hard drive partition to compress, after picking a compression library of your choice. You then click proceed and compression of the partition's contents will happen automatically. It's as easy as that, guaranteed!

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Girls, Girls, Girls AGA [3 Disks]
Girls, Girls, Girls NON-AGA [3 Disks]
Claudia Schiffer "The Works" AGA [3 D]
Beach Babes AGA vol. 1
Beach Babes AGA vol. 2
Beach Babes AGA vol. 3
Beach Babes AGA vol. 4
Beach Babes AGA vol. 5
Lingerie Babes AGA vol. 1
Lingerie Babes AGA vol. 2
Lingerie Babes AGA vol. 3
Lingerie Babes AGA vol. 4
Lingerie Babes AGA vol. 5
NFA Claudia Schiffer AGA/NON-AGA [3D]

HIGH QUALITY SOUND SAMPLES

Here is a collection of the highest quality sound samples available. These are a selection taken from a professional musician's personal compendium. The samples will work with most of the leading sequencers such as Octamed, Music X, Bars and Pipes, MED, Pro-tracker and other programs such as demo creators (Videotracker etc). They are in IFF format and most were sampled at around 33MHz. Please feel free to "break up" the disks: i.e. if you only want one synth disk then choose only one synth disk.

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Paul Overaa throws some light on a coding area that has foxed a lot of would-be Amiga 680x0'ers



Tag wrestling

Part 8

Enjoyable it may be, but coming to terms with the Amiga's multi-tasking system is still no small task. In any language, let alone assembler. In fact for a lot of coders, learning 680x0 assembly language is the least of their troubles – the main difficulty is the Amiga itself. Why? Because the environment is, of necessity, quite complex.

There are in fact more than a few professional Amiga coders who readily admit that they were only just coming to terms with the 1.3 O/S (operating system) when Release 2 arrived. Now WorkBench 3 and 3.1 have appeared on the scene and beneath them lie further enhancements. So where does that leave the programmers who are wanting to make the transition from, say, 1.3 to later releases of the Amiga's operating system. Luckily, some of the most important fundamental changes since 1.3 came with Release 2.04 – which provides the version 37 run time libraries.

By this time you had things like the Gadtools and ASL requester libraries in place. While no one denies that these extra facilities brought benefits, it is pretty obvious that a lot of coders, especially those who have most of their experience on 1.3-based Amigas, felt as though they were just making progress when Commodore moved the finishing line and sent them all back to the start again.

To be honest, things are not really that bad and in many ways the new system facilities make life easier for the Amiga coder, rather than harder. But there are, nevertheless, changes to contend with and unfortunately some of the most visible ones affect even the most elementary operations that an enthusiastic coder might experiment with.

New methods for opening screens and windows are a typical case in point because these operations, like many others, are now done using things called tag lists.

I used tag list-based functions in our recent text file display example and it appears that quite a few of you would like a little more help in this area – particularly in regards to *why* Commodore felt it necessary to change things in the first place (and why there now seems to be all sorts of different ways of doing the same operations).

To get the answer to this we need to look at the types of problems Commodore have had to contend with as they upgraded the Amiga environment.

First and foremost came the need for backward compatibility. Software companies who must maintain products that run on all O/S versions in current use can, of course, be badly hit by poorly thought out operating system 'enhancements'.

To their credit, Commodore went to great lengths to minimise the potential difficulties. In fact, the main reason you will find for some operations being performed in a variety of different ways from Release 2 onwards is because a certain amount of flexibility had to be provided for those developers who, compatibility-wise, were in the unfortunate position of being stuck between a rock – the 1.3 O/S – and a hard place – Release 2 and later.

PROVISION

Incidentally, many developers expecting the 1.3 user base to diminish fairly rapidly as users upgraded have simply opted to provide – and maintain – separate versions of their products. This latter approach is also the one that most Amiga users will want to adopt with their own programs, because experience shows that once they've worked with the new environment their interest in 1.3 coding will dwindle rapidly!

If you wished to open a window in 1.3, and earlier, you would create a NewWindow structure, fill in the appropriate details and then call the Intuition library's OpenWindow() function.

In order to provide the Release 2 system enhancements, however, some established operations, like window opening, required additional parameters to be specified and Commodore's problem was to find a way to do this that would minimise any compatibility upsets.

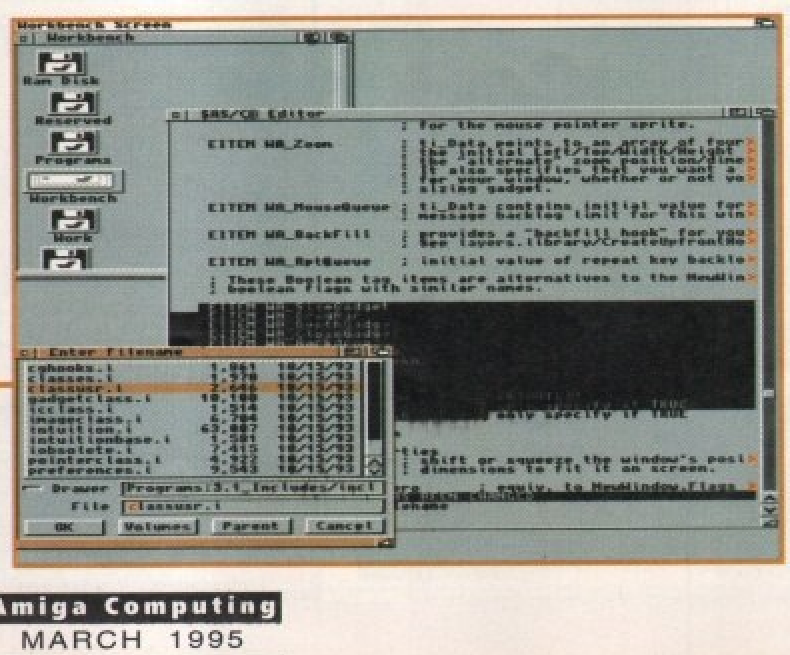
In fact, what they wanted to do was come up with a solution that would eliminate the need to extend existing system structures in future O/S releases altogether.

The approach adopted is based on the use of arrays, or lists of arrays, that contain self-identifying parameter values – each parameter item consists of an identifier and a corresponding 'real' value.

Since these lists can provide a way of tagging additional parameters onto existing O/S structures, they've been called tag lists. Where appropriate, newly devised library function calls look for such items and use them – either in addition to, or as a replacement for, any existing structures they might have used in the past.

Tag lists solve the problem of providing additional parameters but Commodore also had to cope with the backward compatibility issues. As an example of what has been done in this area, let's take a look at the

For those who haven't got the Addison Wesley RKM 'includes and AutoDocs' manual, tag identities can be found in the Amiga include files





Many of the new Amiga system functions now use tag lists to perform their magic

NewWindow structure. This, as all 1.3 coders know, is merely a convenient, fixed size, 'data item' package used to pass parameters to the OpenWindow() function, and in its modern types.i form looks something like this:

```
STRUCTURE NewWindow,0
        WORD nw_LeftEdge        ; initial
Window dimensions
        WORD nw_TopEdge         ; initial
Window dimensions
        WORD nw_Width           ; initial
Window dimensions
        WORD nw_Height          ; initial
Window dimensions
        BYTE nw_DetailPen       ; for render-
ing details
        BYTE nw_BlockPen        ; for render-
ing block-fill bits
        LONG nw_IDCMPFlags      ; initial
IDCMP state
        LONG nw_Flags
        APTR nw_FirstGadget
        APTR nw_CheckMark
        APTR nw_Title           ; title text
for  Window
        APTR nw_Screen
        APTR nw_BitMap
        WORD nw_MinWidth
        WORD nw_MinHeight
        WORD nw_MaxWidth
        WORD nw_MaxHeight
        WORD nw_Type
LABEL nw_SIZE
LABEL nw_SIZEOF
```

One of the things that Commodore did from Release 2 was to create this extended NewWindow definition:

```
STRUCTURE ExtNewWindow,nw_SIZE
        APTR        enw_Extension        ;
pointer to TagItem array
LABEL enw_SIZEOF
```

Right at the end of this new structure is an additional field called enw_Extension and, if the NewWindow nw_Type flag value WFLG_NW_EXTENDED is set, then this field is assumed to point to a tag list – when running under 1.3 this extension field is obviously ignored.

By using these types of transparent extensions, coupled with conditional code that looks for Release 2 libraries – or later – and takes appropriate 1.3-based detours if these are not found, programmers can therefore write code that can take advantage of new system functions while still being runable on older machines.

All a tag item consists of is a pair of four byte values – the first provides a 32-bit identity field, the second an associated 32-bit data value. A few general tag item values, e.g. the TAG_END end-of-tag-list marker, have been defined, along with the TagItem structure itself, in the utility/tagitem.i header file. Most tag identity values, however, are context specific and you'll find them defined within the include files containing the structures they relate to.

WA_Width, for example, is a tag used to specify the pixel width of a window, so in order to set up a tag definition that specified a width of 640 you'd use this statement:

```
        dc.l        .        WA_Width,640
```

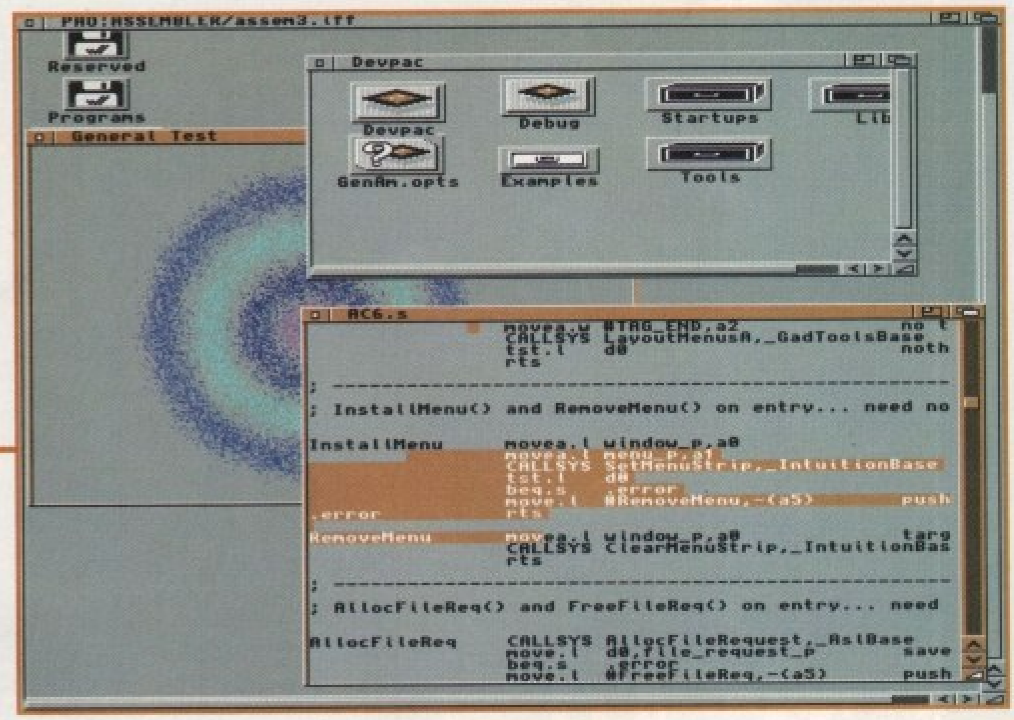
```
window_tags     dc.l        WA_PubScreen
workbench_p     ds.l        1
                dc.l        WA_Left,0
                dc.l        WA_Top,0
                dc.l        WA_Width,640
                dc.l        WA_Height,200
                dc.l        WA_DragBar,TRUE
                dc.l        WA_Title,NULL
                dc.l        TAG_DONE,NULL
```

Figure 1: A typical tag list definition

Most tag identities and values can be set up in this way – i.e. as static definitions consisting of identity+value pairs – because, for the most part, it is possible to decide what values are needed before assembling a program.

Some tag data fields, however, for example those that require the values of pointers returned by system calls, cannot be set up in this way since the values are not known until the program runs.

The easiest thing to do in these cases is to either give that particular data field a separate label or use the tag list's initial label as a base point and reference the required tag fields using indirect addressing – discussed last month. Either way you'll be able to jam the required pointer into place when the program runs.



What! No example code to look at? Don't worry – that starts arriving next month!

Tag list use

So far I've been trying to paint a general picture about how and why tag lists came into existence, but to finish this month's instalment let's look at one illustration of their use.

I've chosen window opening because, since Release 2, there have been five different ways of writing window opening code and by using this topic I'll be able to explain the different methods available.

To start with the programmer can set up an ExtNewScreen structure containing a pointer to a tag list, and in this case the OpenWindow() function call can be made in the usual fashion. Alternatively, the following OpenWindowTagList() function can be used:

```
Window OpenWindowTagList(NewWindow,         TagItems);
d0                       a0                 a1
```

OpenWindowTagList() can actually be used in two different ways: Firstly, the originally required parameters can be specified, a'la 1.3, in a NewWindow structure with additional (Release 2 onward) arguments being provided in a separate tag list.

Secondly, a NULL NewWindow pointer can be used coupled with a tag list that contains all window opening parameters – only the non-default value tags need be supplied.

That covers three of the approaches available for making a window opening call. Unfortunately, or fortunately depending on your viewpoint, two more variations exist based on the use of the related OpenWindowTags() amiga.lib function.

Rather than passing a single tag list pointer, this function expects to get its tag parameters from the stack – along with a NewWindow pointer. Needless to say, these methods are provided for the benefit of C coders rather than assembly language programmers, so I'll say no more about them.

Once a coder has created a tag list for a function, the parameters for that function are effectively in place. This means that the actual calling schemes for tag-based functions are extremely simple. With the OpenWindowTagList() call, for example, we clear register a0 – because we aren't using a NewWindow structure – and load register a1 with the start of the tag list like this:

```
        movea.w     #NULL,a0
        lea         window_tags,a1
```

Having done that we then just make the OpenWindowTagList() library call:

```
        CALLSYS     OpenWindowTagList,_IntuitionBase
```

Easy isn't it – and all tag list-based functions are just as easy to use. In fact, having now dealt in detail with what tag lists are, it is time to start getting practice with functions that use them.

That, incidentally is what we'll be doing next month and I have another little mini-project, complete with runable cover-disk code, to drive home the ideas I've discussed in the last two issues!

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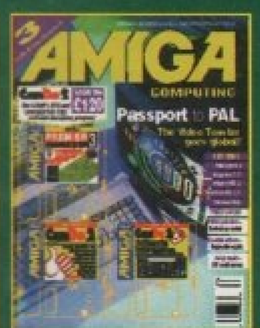
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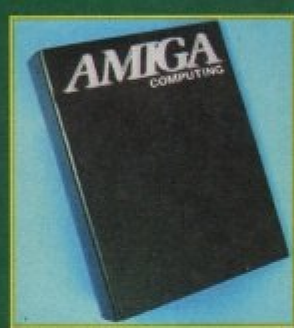
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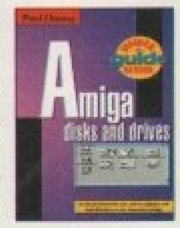
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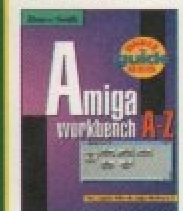
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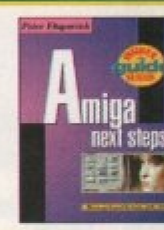
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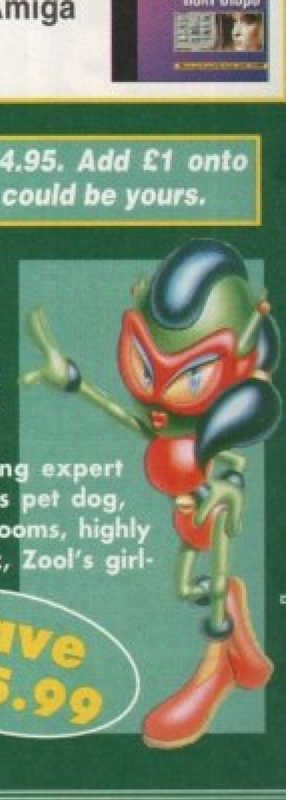
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● Zool 2



This widely acclaimed game follows Zool's travels through a further six huge levels, larger than those in the original, that feature a number of different ways of completion.

Zool has new and special abilities, including expert climbing skills and is now accompanied by his pet dog, Zoon. With great sound effects, hidden bonus rooms, highly intelligent enemies and the choice to play Zooz, Zool's girlfriend (shown here), Zool 2 makes an excellent free gift.

Zool 2 is suitable for any machine, though A1200 owners can choose an enhanced version (see order form).

Save £25.99

SYSTEM

Your essential guide to Amiga gaming



Natural born killers?

Can your trigger finger cope with Core Design's frenzied shoot-'em-up?

This month's gaggle of game reviews

SYSTEM ANALYSIS

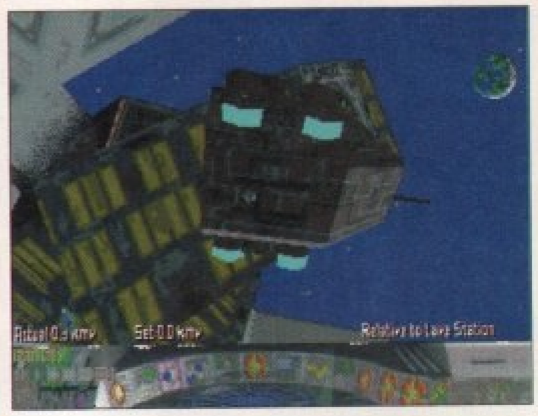
The chaos theory

The highly acclaimed The Chaos Engine is back in town. The Bitmap Brothers, noted for their other success stories Speedball and Xenon, are working on a sequel to their much loved strategy shoot-'em-up. Called The Chaos Engine 2, originally enough, it plans to have many new features while keeping the same successful gameplay.

One difference is the set which means you can now interact more with the environment. For example, you can walk under things, hide behind walls and so on and you can also ambush characters, which all adds new angles to the gameplay.

Expect to see the game around Easter time.

A word in your Front-ier



Frontier: First encounters will improve on the previous episodes with enhanced graphics and sound

Sequel time again for Gametek as they are close to releasing the third in the Frontier/Elite saga. Called Frontier: First Encounters, it will have many new features added including different cityscapes and rural landscapes.

Those who played the original Elite will remember the Thargoids who will be making their comeback. In-game journals will also be added to keep you informed of what's happening in the Universe. Expect improved graphics and even better sound too.

system online



Spring is in the air so System's resident Percy Thrower, Tina Hackett, is here to see what's budding in the fertile soils of the Amiga games allotment

Strategy with style

All manner of weird and wonderful staregy games hit the shelves and extremely popular they are too, especuially with the more cerebral gameplayer. War games are a particular breed of these and have sold in abundance. But surely there is a limit to just what else can be done with them? No, just leave it in the capable hands of the strategy gurus, Impressions, who are promising something a little bit extra and are working on their offering in the form of Front Lines, a war game simulation. This game is set in the future, occurring during the centenary anniversary of the bombing of Peal Harbour.

The hundred years of peace that have followed the Second World War have been broken and the nations are at war with each other once again.

Front Lines aims to be as realistic as it can, with features such as graphical reports to provide situational awareness, air support, leadership qualities and morale included, supply lines, fog of war and weather.

Also featured in the game are fully animated movement and detailed graphics which should bring a new dimension to this game genre

This game should go down well with serious strategy buffs everywhere. Publishing is by Daze Marketing.

The bear necessities

Disney's classic adventure, The Jungle Book, is to appear on the Amiga. Already a hit on the Mega Drive, Super Nintendo and GameBoy, all the fun of the jungle is ready to take the A1200 by storm. In the capable hands of Virgin Games Inc, the team behind Cool Spot and McDonald's Global Gladiators, you can expect to see The Jungle Book this month.

You play Mowgli, the man cub, who wishes to return to the Man Village. Twelve levels await and can boast to have all the characters from the film. These will play an integral part of the game, for instance, hitch a ride on the elephants' backs on the Dawn Patrol or float downstream on Baloo the bear's stomach! Expect to see Shere Khan too.

Ammunition at your disposal will include boomerang bananas and a nut-filled blowpipe. Virgin claim the game will have an innovative Dual Contour Map which enables the character to interact with the foreground and background and so will double the actual play area.

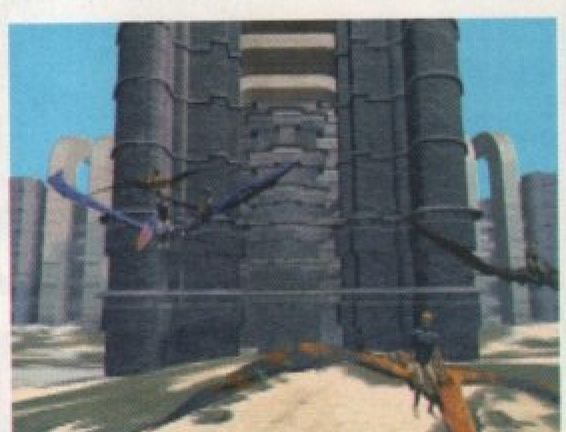
Also from Virgin this month is Lost Eden, a fantasy adventure for the CD32. Set in an environment where dinosaurs and humans live side by side, there are continual wars between the herbivores and the carnivores. You play Adam, a guy in search of a solution to all the battles. The answer is to build citadels to stop the carnivores attacking, but first he has to discover the knowledge behind them.

Rendered 3D graphics will provide the prehistoric scenery complete with many dinosaur species, including some fictitious ones too. Speech will be used throughout.

The development is by Cryo, whose previous successes have been KGB and the CD version of Frank Herbert's Dune.



CD32 owners can get their hands on this unusual adventure soon



Visit pre-history to a time when dinosaurs (and humans!) roamed the Earth



Cryo, the development team behind KGB, are working on the game which promises to be highly atmospheric

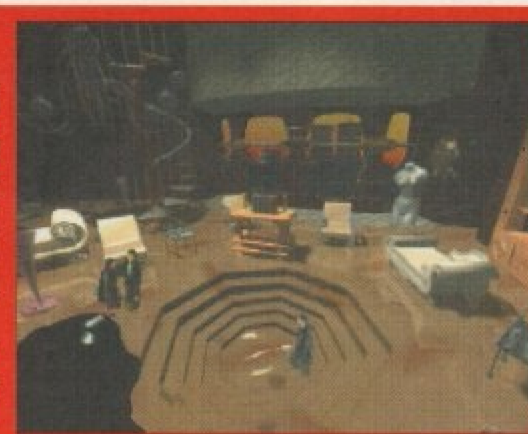


David Braben's space games have proved highly popular with gamers

More blood and gore

Gametek have a new adventure on offer called Bloodnet. It's a point 'n' click adventure but looks that bit different from the norm. It's an unusual mixture of gothic horror meets Cyberpunk and takes place in the future. Blood-sucking vampires are a constant threat to the population and it's down to one chap, Ransom Stark, to raise a band of vampire slayers to save the day.

Graphically, Bloodnet looks to be superb, creating the futuristic environment well. It does carry an 18 certificate so for those that aren't partial to blood and gore, you've been warned! It's initially available for the A1200 with an A600 version to follow.


Bloodnet – a futuristic adventure that really does look differet

Ghostly apparition

What, a platformer from Microprose? Yes, it's true. Having established their reputation for quality strategy games they are now trying their hand at platformers.

It's about a ghost, a ghost called Boo who lives with Stupendo the Fabtastic, a stage magician. The plot thickens when King Bully – the cow – steels his wand and Boo has to get it back.

The action will take place over five levels – The Hall, Kitchen, Garden, Freezer and Bathroom – and can be completed by finding, and using objects in various ways.

Boo can also take the form of other monsters and use their different skills to help him, such as Bratula who can fly or Fran-Kid-Stein who can electrocute.

Keith Scoble, renowned for his Danger Mouse animations and Jamie and his Magic Torch, will be working on the project so we can expect something special on the visuals side.


The talents of Keith Scoble are to be found in 'Boo'. Expect some slick animations

In Brief

Jean-Claude's cop out

As well as Timecop: the movie, starring Jean-Claude Van Damme, and a video game from JVC, there is now going to be the comic! Manga Publishing will be bringing out the Timecop comic – a 64-page monthly mag.

Novelty value

You've seen the ads, you've read the reviews and you've played the game – now read the book! Mirage's Rise of the Robots received a mixed reception from the specialist press, although it sold in abundance. Now the robotic beat-'em-up is to have a novel.

Jim Murdoch is the author of this first ever novel based on a computer game and it will be published by Penguin.

It's Crickeet!

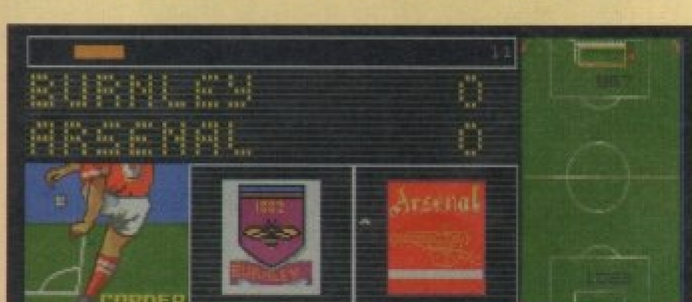
Cricket fans will be pleased to hear of Grandslam's latest venture, 'It's Cricket' (preliminary title). It will have a similar style of game play to that of Audiogenic's Graham Gooch, but it will also add a chunk of strategy. For a realistic touch, digitised pictures of international players will be included.

Also from Grandslam is another sporting title. An enhanced CD32 version of Nick Faldo will be available soon.

Team tactics

The developers behind the hit footy management game, Tactical Manager, have been busy on its successor, Tactical Manager 2. Talking Birds have acted upon what, you, the players think, and have added millions of new features and improvements.

The computer intelligence has undergone a change and is now even higher. The computer sides will try such devious tactics as time wasting with five minutes to go, and they will also tend to choose better formations. Match highlights can be printed out and include all the facts and figures such as the man of the match and the attendance. The European rules have been included too, therefore in European matches only three foreigners can play and so on. There are many more new features and we'll be bringing you a full match report soon.



Footy management fans can look forward to the game this month



Tactical Manager 2 has many new features, making it more comprehensive than ever

System Selections

Stuck for what to spend your hard earned cash on? Take a look at some of the best games we've seen over the past few months.

Ruff 'n' Tumble



This is one of the best platformers I've played in ages. Wunderkind have done an amazing job and seems to have got every single element of the game just right. The graphics are superb, the sound is good, the gameplay is amazing and it has an uncanny level of addiction that'll keep you playing it again and again. Ruff 'n' Tumble is, quite simply, the cutesy platformer of the year.

Roadkill



A sore thumb and a foul temper were sure signs that the game had me gripped. It may not look much, but it has all the elements that a thoroughbred arcade game should have. The developer deserves full credit for balancing so many appealing features in one game. Roadkill is yet another triumph for a software house that can take a simple game and make it shine.

Sensible World of Soccer



The interaction between the tactics and the transfers is just brilliant and in my mind SWOS is the world's first football game that has managed to get a perfect balance between a pure arcade game and a management simulation. I had my reservations about yet another episode of Sensible Soccer, but I've had those firmly destroyed because SWOS is the best Amiga game that money can buy.

Jungle Strike



Amiga owners have waited a long time for Jungle Strike to be converted, but their patience has been rewarded with a game that will test their arcade and tactical skills to the limits. With its impressive graphics and the superbly designed game system, it could well be the best chopper title to date.

Shadow Fighter



As far as beat-'em-ups go on the Amiga, I've been more than pleasantly surprised by Shadow Fighter. It could go from strength to strength after the release of the AGA version and finally take the beat-'em-up crown away from games like Body Blows and Mortal Kombat. Shadow Fighter is, quite simply, thumping good fun.

The scores on the doors

A guide to how our revolutionary scoring system works...

We're sure many of you are now familiar with our new scoring system, but for those reading *Amiga Computing* for the first time and those who might have forgotten exactly how it works, here is our guide to the System scoring, err system.

In our opinion, review scores have lost their context as a percentage; some products receiving scores which were only a few percentage short of being the "perfect" game, when in truth they were only marginally above average.

OK, so the scores might seem unnaturally low at first, but that's only because other scoring systems tend to be on the high side and perhaps not as comprehensive or honest as they could be.

In the long run you'll receive a more concise and reader-orientated review that's geared towards the consumer.

0-20 This is given to the lowest of the low

21-30 An all-round poor game that may have a single saving grace

31-40 Just below the average, perhaps let down by a few indiscretions.

41-55 Games of this score are roughly average with 50 being a perfectly average score.

56-66 This is an above average game and is worth buying. For this reason it would be awarded the BRONZE award.





67-77 A game of high quality that you as a reviewer would have no reservation in recommending. Anything of this ilk would be awarded the SILVER award.

78-89 A brilliant title. Definitely worth buying and almost the definitive of its kind. This type of game would receive the GOLD award.



90-100 The best in its genre. This benchmark title receives the PLATINUM title.



beat the system



Welcome. Here's a guide on how to kill the first three evil controllers of the web in Empire's dark, wonderful and hyper-violent adventure game. Let loose the puppies of war!

The begining

Make sure you watch the animated introduction sequence because it's the only way of knowing what your first objective is. You start off the adventure in your girlfriend Eden's bedroom and there are a number of objects you must find and pick up. Some of the items that need to be collected aren't that obvious.

The first object is the wallet which is on top of the desk, then in the same room you should pick up your cigarettes and zippo lighter. Open the right-hand drawer and take the pound coin. Talk to Eden and she'll tell you to go to work at Sparky's bar.

Make your way into the kitchen, open the drawers and take out a table knife. Now open up the microwave and take the key that's been placed inside it. On the table there's Eden's network card – pick it up because it's needed further on in the game.

Push the button by the door, go into the lift and activate it by using the controls on the inside. Take the wrench, the oily rag and the screwdriver from the garage. Leave the flat and head down to the end of the street.



The start of the bloody and violent adventure that is adventure. Follow this guide and gaming success will be yours

Go to Sparky's bar. Once inside, find your usual seat by the bar. Talk to Sparky and then run your cashcard through the scanner. Talk to the man sitting next to you, who'll inform you that the rock star David Crane is in town. Leave the bar and go to your flat.

Go through the lobby and you'll find the door to your flat on the left-hand side. Use the keypad and type in the code. This number can be found in the back of the 'Diary of a Madman'. Enter the flat and pick up the red network card that lies beside the keyboard. Take the Ankh from the clothes drawer. Place the network card in the interface on the wall and then operate the network monitor. Logon using your password (which can also be found in the diary), list what's in the mailbox and read Louis' message. List what's on the cartridge and read the private message. This will give you door codes to get into Eden's and Louis' flat.

Go to Louis' flat and watch yourself getting mugged for your trainers. Use the keypad and enter the flat. Talk to Louis and he'll tell you to go to the pool hall. Take and put on his trainers which are in the bathroom. Open the unit drawer and take out Louis' pool hall membership card – make sure you examine it. Leave Louis' and head for the pool hall.

Once at the hall, talk to the assistant behind the hatch. Run your membership card through the reader by the door, then use the lift to go to the basement. Talk to the bartender and remember the door code he tells you.

Go to the far left-hand side of the pool hall. Via the newly acquired number, use the keypad and enter the office. Talk to Silverman and then run your cashcard through the scanner on the desk. Take the gun from Silverman and leave the office.



The Killing ~~of~~ of Crane

Go to the Regency Hotel and talk to the David Crane fans inside the foyer. Talk to the receptionist, use the cashcard scanner and take the keycard. Call the lift and use the keycard in the lift controls. When it stops, leave the lift and head left onto the next screen. At the bottom of the corridor is a firepoint – open it, take out the axe and head back to the lift.

Use the table knife on the lift controls and then use it again, this time on the green wire. Use the handle and you'll clamber up on top of the lift. At this point I strongly advise you to save your game because the next stage is a bit tricky.

Use the axe on the lift doors. As soon as the next screen appears and as soon as the game will let you, open your inventory and use the axe on the guard on the right. Quickly open your inventory again and this time use your gun. Both guards will now be dead, so you can safely walk through the suite to David Crane's room.

You'll see him having a, ahem, good time with one of his many groupies and as soon as the game will let you, open your inventory and use your gun. After the carnage that follows you'll be transported to the Dreamweb.

Talk to the keeper and once the conversation is finished you must head south to the end of the corridor. Pick up the purple crystal for use later on and go right into the next room. Use the first door you come to and go through it, then use the key from the microwave on the plinth in the middle of the room. You'll be transported back to your own dimension and you'll wake up in an alleyway.



When it comes to killing David Crane, the rock star, don't hang about because you could end up with a round of bullets in your back

Dreamweb

Murder on channel 6



Replace the old broken fuse with the new one and you'll now have control of the winch. Drop it on the General's head and another trip to the Dreamweb is on the cards

Your next target is a guy called General Sterling. Make your way out of the alleyway and go back to your flat. Once inside your home, boot up the network computer. Read all the latest news headlines and you'll, luckily, find out where General Stirling is.

Go to the Channel 6 TV station and wander all the way round to the back of the building until you see a guard. Talk to him and you'll find that this elderly geezer won't let you enter the station, so you'll have to use your gun and shoot him in the face to get past. Operate the security controls and head left onto the next screen.

Walk into the building via the now opened door and pick up the brochure. Drop it on the floor and you'll find a passcard. Pick this up and place it in your inventory. Head left and use the newly acquired card on the door at the bottom of the screen.

Use your screwdriver on the fuse box which is attached to the right-hand wall. Take the new fuse and leave the room. Head right and go past the entrance into the next screen. Enter the room and use the ladder. Open the winch control and replace the broken fuse with the new one. Use the winch and watch General Stirling do his infamous impression of the inside of an abattoir.

After performing your deadly deed for the day, you find yourself transported back to the Dreamweb. Once you've talked to the keeper, find your way out of the web, but remember to use a different stone door this time.

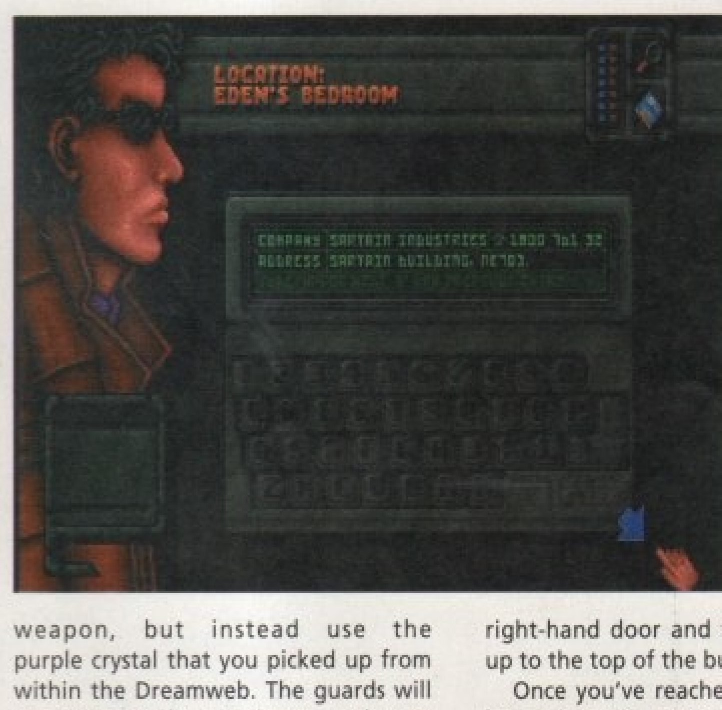


Inside Louis' flat – a disaster zone. Ignore the rubbish and have a chat to your mate, who'll help you out with a pair of trainers



Keep a careful check on your inventory. Some of the objects could be just red herrings, so try not to clutter your pockets with useless items

The death of Sartini



To find out where Sartani Industries is, go to Eden's flat and while she's in the bath have a peek at her personal organiser

Go back to your flat and use Eden's network card in the slot on the wall. Use the network monitor and read the current news headlines. Read what's on the cartridge to get Sartani's key-code and then leave the system.

Head to Eden's flat and you'll find her in the bath (gratuitous nudey scene ahoy). Leave the bathroom, go in to the bedroom and use Eden's personal organiser which is on the bed. On the organiser you'll find the address for Sartani Industries.

Travel to Sartani Industries and use your recently acquired keycode on the keypad by the door. The security computer will ask you for a password – ignore the stupid computer and use your trusty gun on it instead. Head left, get in and use the lift.

You'll see Sartani run off and his guards stand in your way with their guns raised. Don't use your weapon, but instead use the purple crystal that you picked up from within the Dreamweb. The guards will spontaneously combust and you can move downwards into the next screen.

There's a briefcase lying on the floor, pick it up and open it. You'll find some papers inside, so take them as they'll come in handy later on in the adventure. Walk through the right-hand door and follow the stairs up to the top of the building.

Once you've reached the exit, head let and you'll see Sartani escaping in his helicopter. Use your gun, Sartani will die in the explosion and you'll be transported back to the Dreamweb. This is, unfortunately, where the guide to Dreamweb finishes, but hopefully the concluding part should appear in next month's System.



Ryan is an extremely violent man and possibly very disturbed to boot. Give this man an axe and there's no telling what he might do!



Inside the Dreamweb keep an eye out for a purple crystal. Have a talk with the keeper, and he'll tell you who's next on your hit list

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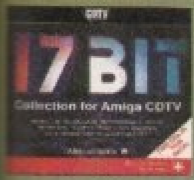
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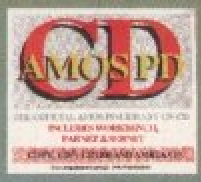
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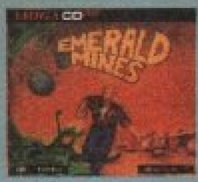
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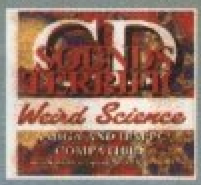
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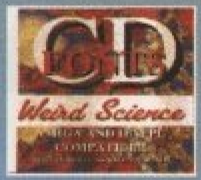
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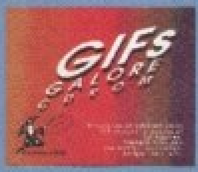
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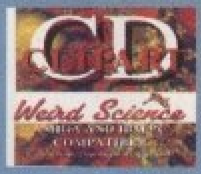
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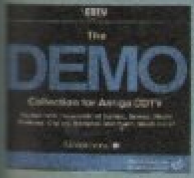
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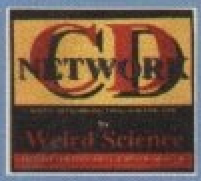
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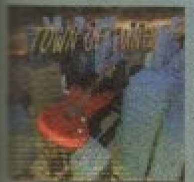
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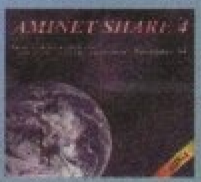
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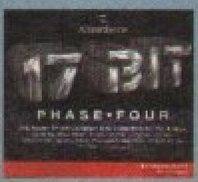
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INTRODUCTION

I'm confused. A game arrived in the office and it's by Delphine – so it's got to be a quality adventure game, right? Wrong. Okay, so it contains basketball star, Shaquille O'Neill, so it must therefore be a basketball sim? No, wrong again. It's a beat-'em-up.

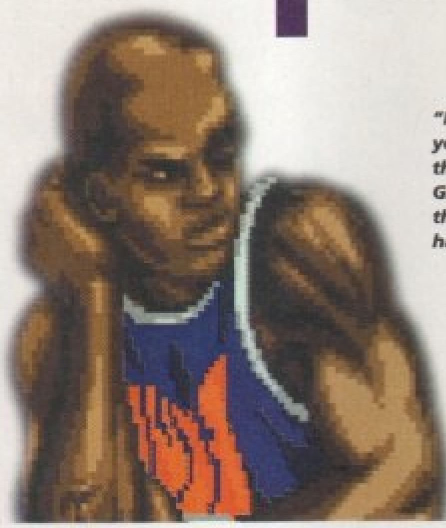
Am I missing something or would someone please tell me what on earth a basketball star is doing in a beat'-em-up? I mean, have all the norms of licensed games gone completely out of the window? It would seem so. Even from the box cover things are already looking pretty cheesy. Said basketballer is in 'menacing' pose and the slogan underneath reads 'Enforcer of Justice'. Cheesy? Most definitely! However, putting all initial doubts aside, I decided first impressions aren't always right and decided to take a closer look.



Corny slogans abound – hardly put the fear up you, do they?

Shaq-Fu

It's 'battle of the beat-'em-ups' on the Amiga at the moment and there's yet another contender that fancies its chances. Tina Hackett referees



"If the wind blows, your face will stay like that." Obviously their Grannies didn't tell these guys this, as they have a post-match sulk



STORYLINE

Long ago in a far-off place called The Second World, there ruled an evil sorcerer, Sett Ra. And like all bad guys, he's gone power-crazy and intends to take over the First World, Earth. He creates an assassin called Beast and together they intend to kill the Pharaoh of Egypt and take his throne.

They succeed and the disguised Sett Ra takes over as king. But the Pharaoh's son, Ahmet, is not so easily deceived and together with his grandfather and a coven of wizards, they send Sett Ra back to the Second World, bandaged mummy-style and imprisoned in a rune-encrusted pyramid.

Beast frees his master and they set out for revenge. But to end his exile from the First World he must perform a ritual on the descendant of Ahmet. Beast finds the child and all is set for the final battle. Only the Chosen One can stop him now.

It still doesn't explain what a basketball player is doing in a beat-'em-up though! Well, apparently it does because Shaq' happens to be 'the chosen one', the one who possesses strength, courage, agility, spirituality, intelligence, martial arts skills, etc, etc. And luckily for mankind, Shaq just happens to be on his basketball tour in Tokyo which just happens to be the right place at the right time...Contrived? A little!



The 'spin-and-claw' move which seems to work a lot for this character

SOUND

Sound is limited to an uninspiring, and rather grating, introduction tune which does little to generate atmosphere, and the in-game effects are nothing more than the occasional weapon clash or yelp of pain. The punching noises are pretty feeble too.

Mortal Kombat 2 has a good range of samples, as does Body Blows Galactic, and it's a shame that something with a little more depth could not have been used here.

20%

GRAPHICS



The graphics are neither particularly bad nor good. This may sound like a case of 'fence-sitting' but it's true. The backdrops don't stand out as being all that spectacular. They do their job and are unobtrusive, which means you can concentrate on gameplay, but they don't really provide much atmosphere either.

The animation of the sprites does work quite nicely though. Their moves are fluid and look convincing as they bound around the screens. The sprites are smaller than usual which means a lot of detail has been sacrificed and it takes some getting used to.

Also, the characters themselves don't really come across as menacing – they don't look as if they could ransack a kiddies' playground, let alone the First World!

40%



The story sequence tells the highly likely scenario



The different options to complete the game in, like this 'Story Mode', add variety



There are a fair amount of fighters you can play or compete against



The handy 'flip-people-over-you-head' move which also seems to work a lot of the time



The sprites are smaller than the norm and they take some getting used to



The range of baddies vary from the far too easy to the ridiculously hard



The backdrops are plain and don't create a great deal of atmosphere

- Publisher: Ocean
- Developer: The Dome
- Disks: 6
- Price: £25.99
- Genre: Beat-'em-up
- Hard disk install: No
- Control system: Joystick
- Supports: All Amigas
- Recommended: 6800 upwards

FLASHBACK

Over the past few months we've seen many beat-'em-ups arrive on the Amiga, varying from the good, the bad and the down-right atrocious. Mortal Kombat 2 is now one of the best beat-'em-ups we've seen on the Amiga so far, with its excellent, gory graphics and tonnes of playability.

Then there was Gremlin's Shadow Fighter, again a highly addictive addition to the genre. And how could we forget Rise of the Robots, which showed what could be done graphics-wise, as long as playability isn't a priority!

Shaq Fu sits somewhere horribly in the middle. It's not the worst beat-'em-up on the planet, but compared to MK2/Shadow Fighter/Body Blows? Well, it's like comparing your little scooter to a fantastic Harley, or a transport caf' cheeseburger to a roast beef platter. Need I say more? Shaq-Fu just isn't up there with the big boys.

OPINION 30%

As every gamesplayer knows, playability is the all important factor in any game and if there are no distractions such as fancy graphics or sound then when playability is not up to scratch it sticks out like a sore thumb. This is the case in Shaq-Fu.

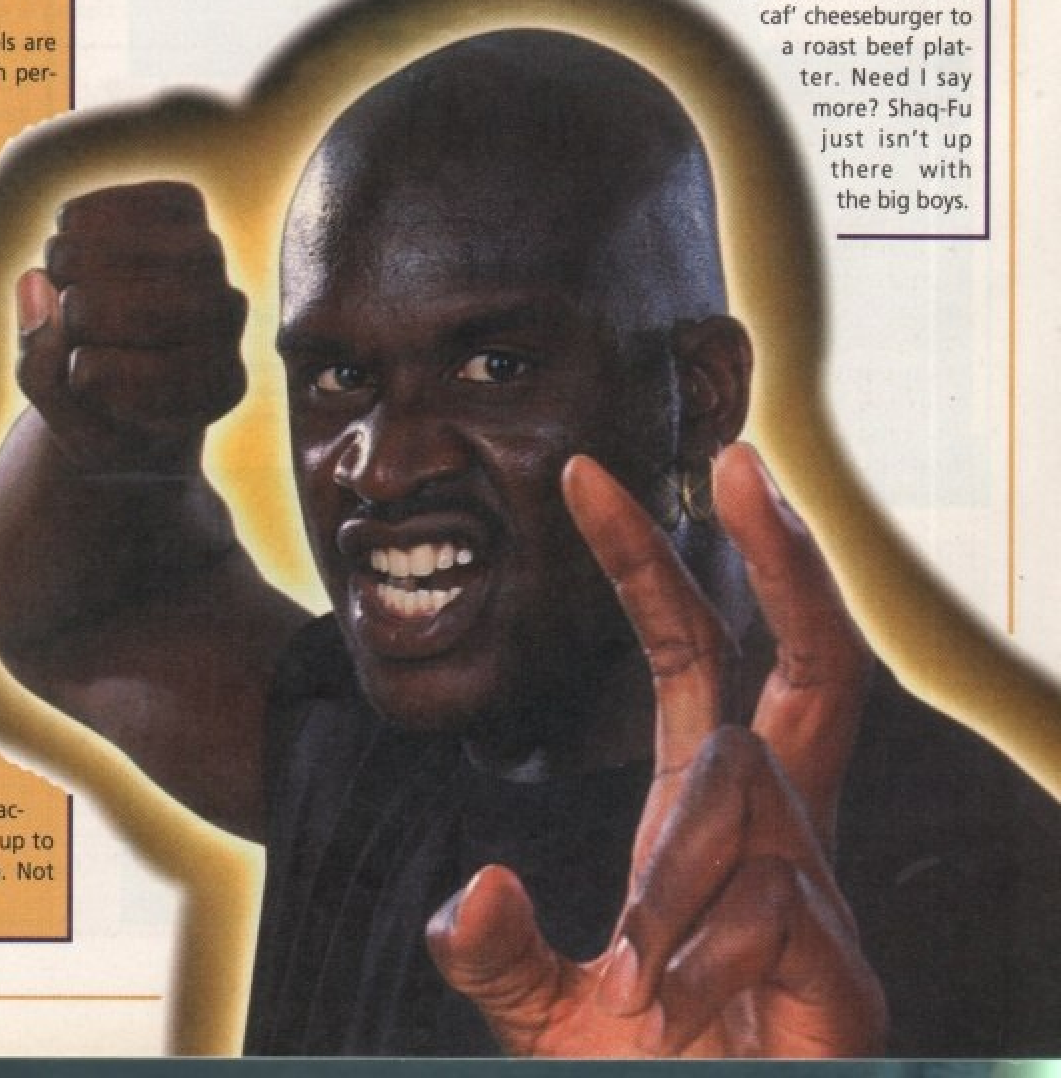
Control of the fighters is more frustrating than it should be. The controls are not intuitive and the moves are fiddly to operate. Some of the fighters can perform magic – if that is what all this pointless white screen flashing is all about – but this prevents you actually seeing what's going on for a few seconds, and all you can do is wait for your opponent to come over and punch the crap out of you.

Adding to the 'cringe factor' are the awful cliché sayings of the fighters such as threats to "slap you silly" or "I am too smart for your foolish style." It doesn't add anything to the game and it certainly doesn't provoke you in to a violent frenzy.

Another total waste of time is the ridiculous amount of disk swapping involved. There are six disks and before each fight you are subjected to a lengthy and most annoying process of changing disks several times. And it's not hard disk installable either, which is pretty unforgivable when the loading time is equal to the amount of playing time you get.

Unfortunately, there just isn't anything new or original here to get excited about. Two-player mode is boring, at best, and the tournament varies between far too easy – because some characters need just one move to defeat them – and far too hard – for example, the characters that use magic result in you not being able to get near to defeat them. There is no middle ground and little opportunity for skilful hand-to-hand combat.

It does have some good points – the characters move brilliantly, there are plenty of different modes to play the game in and there are many characters – but unfortunately the bad points outweigh the good. Nowhere near up to the same standards of other quality beat-'em-ups available for the Amiga. Not even close.



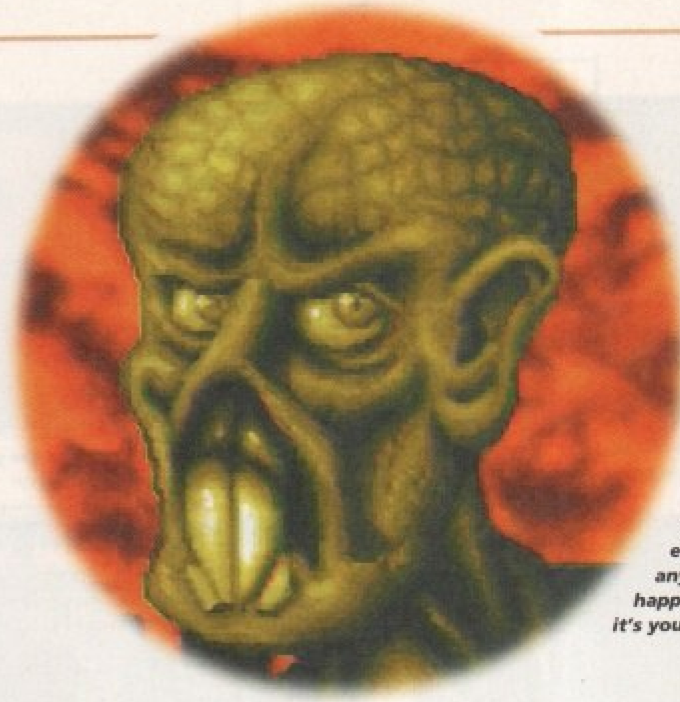
Death

INTRODUCTION

A quest to seek your way out of huge labyrinthine dungeons. A host of evil monsters of increasing ferocity with a taste for your blood. A hero whose main challenge is to storm around firing indiscriminately at anything that moves, perhaps pausing momentarily to snatch the odd power-up.

This hardly sounds like the basis of a ground-breaking game, yet it's exactly what lies at the heart of the most lauded game of the '90s – ID Software's Doom. The concept is old-hat, but somehow its developers managed to fill this classic with enough suspense and adrenaline-fuelled action to turn the gaming world upside down.

Now, after all too long a wait, software houses are attempting to imitate that success on the Amiga, and the first of the bunch is Alternative Software with the darkly futuristic Death Mask. System puts its fire power to the test.



This one's ugly enough to make anyone trigger happy. Unfortunately, it's you



There's some impressive hardware in the game, but you can only possess one gun at a time



Two-player mode: Decoy images of your opponent are there to confuse you



One of the more intimidating enemies you can meet



A typical stand-off with a humanoid enemy – the word 'Spanner' springs to mind

PLAYABILITY

Great graphics, sensational sound and a better than average storyline thrown into the bundle – add it up and surely you get a winning title. But of course, you'll realise from that line alone that this isn't the case; the trimmings in Death Mask are good, but at heart it's just a turkey.

The irritating thing is that it was almost a very good effort. Not long ago, I'd have said a game like Doom couldn't be done on the Amiga but now I'm not so sure.

Admittedly they've used small windows to display the action, but it's all very pacey considering the level of detail. It's not limitations on the Amiga that cause the problems, but rather a combination of frustrating misjudgements in design.

To start with, the whole point of the game is that it's a shoot-'em-up. It's rather disastrous, therefore, that the collision detection is hopelessly inaccurate, allowing you to blow cobs of flesh off monsters nowhere near your gun sights.

Players should be encouraged to fight intelligently, but in Death Mask there's not much point in trying. Battles occur in narrow corridors which leave you trapped in face-to-face shoot outs, pummelling the fire button with a mindless lack of interest.

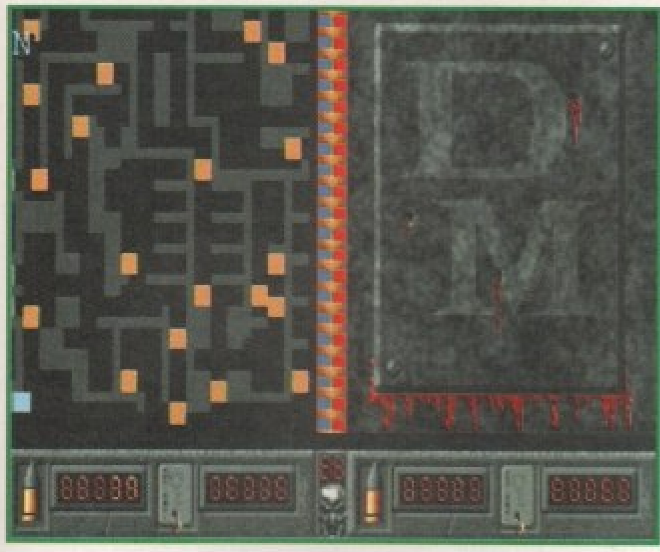
Each level may have a different look, but the initial interest this provokes soon fades. Up to now I've found few things to arouse my curiosity, for whereas Doom is full of surprises, Death Mask feels like you're playing a paint ball game in a dressed-up warehouse.

So far, for example, I haven't come across any stairways, lifts, secret switches or puzzles. Some of these features may well exist later on, but having played it for as long as I did without having my appetite whetted, it's not surprising if I gave up hope.

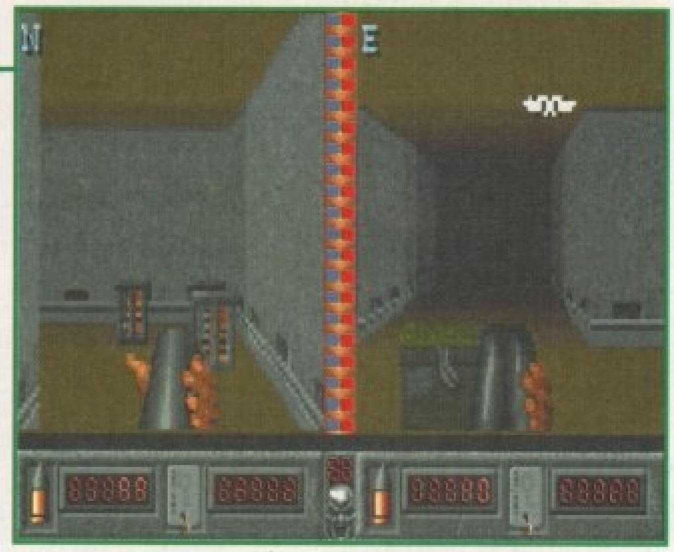
It's good that a two-player option has been included, and even better that ten arenas have been developed so that players can go head to head against each other.

Unfortunately, even the pleasure of strafing friends with cannon fire failed to compensate for flaws in the game engine. The directions you can move in are so restricted that conflicts were too often resolved on the basis of luck rather than skill.

48%



Calling up the map is vital to avoid becoming lost in the maze. It would have been better, though, if it had indicated the direction you're pointing in



Player one prepares to load up for battle

Mask

For too long, PC owners have been able to bask in the knowledge that only they could experience the excitement of Doom. Now Amiga owners have finally got their own 3D rival. Gareth Lofthouse chooses his weapons and shoots from the hip

STORYLINE

Death Mask is set in a future in which mankind has recklessly exploited the possibilities of genetic engineering in an attempt to design desirable and useful living beings. Naturally, during experimentation many lifeforms are created that are abhorrent to their creators.

Exhibiting a typically human sense of responsibility, these 'aliens' are packed off to stay safely out of sight on other planets. Left to struggle for survival, some of these creatures developed their own societies.

You and your twin are rat mutants and members of the Death Mask, an elite military corp charged with the defense of your home planet. Now, as other aliens and their agents mount a mass invasion, your mission is to protect and survive.

GRAPHICS

There's a great deal to admire about the look of this game and in some respects it's good enough to surprise even the most devoted Amiga fan. On an A1200 the movement is swift, even in two-player mode with the detail turned on high.

The backgrounds are impressive and good enough in places to give Doom a run for its money. Unfortunately, it doesn't have enough atmospheric detail, such as flickering lights and gloomy depths, to maximise the suspense.

Each level has a different appearance ranging from science labs to bio-mechanical wall textures. Mission targets like nuclear reactors or encased embryos are equally impressive.

So far so good, but there are some problems. In Doom, the monsters look like they'd tear your head off as soon as you blink. In Death Mask, the enemy charges at you like it's got the contents of its bowels dangling in its pants; in short, they can be ludicrous rather than frightening. The 3D view is not always perfect either. This is most noticeable when you turn round, because what you see doesn't reflect the true design of the room you're in

80%

SOUND

More than in any other game genre, it's important that players lose themselves in the experience, and Doom proved how important audio is in allowing them to do this. Fortunately, sound on the Amiga is impressive by any standards, and Alternative Software have done a lot to exploit its capabilities in Death Mask.

Everything sounds like it's been sampled for realism. Convincing gunfire, pump-action loading, groaning mechanical doors and cries of pain add another dimension to your subterranean struggle. Even in quieter moments, the player's footsteps echo as they rush through silent halls.

The music is also exceptionally good for the style of game, with a sinister theme preparing you for the conflict before you start.

48%

Publisher: Alternative Software
Developer: Alternative Software
Disks: 2 /1CD
Price: £29.99
Genre: Shoot-'em-up
Hard disk install: N/A
Control: Joystick/joypad
Supports: A1200/CD32
Recommended: 68020

OPINION

55%

Nobody would have been happier than me if this game had turned out to be as good as it looked. I've always got time for simple, break-neck paced action accompanied by the sound of heavy artillery as players blaze their way to success.

Unfortunately, the excitement that Death Mask superficially promises is rarely delivered. This is a great shame, because you get the feeling that it was much more than a slap dash effort on the developer's part.

Getting 3D graphics of this quality moving swiftly and smoothly must have been a challenge, and the outstanding sound lends the game impressive gravity. Ultimately, however, the gameplay was not rewarding enough to keep me coming back.

It's of little consolation to Alternative Software, but what Death Mask shows is that the Amiga has the potential to support a good game in the Doom genre. Team 17 are currently working on a variant of their own, so let's hope they meet with greater success.

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G303 DIMENSION X 2 player LIGHT CYCLE GAME
G304 GRAND PRIX SIMULATOR (A500 & A1200)
G305 SQUATS REVENGE VG operation wolf
G309 E-TYPE (not A1200) best Asteroid
G310 NEBULAR Excellent 3D shoot em up
G312 GAMES PACK 28 3 high quality games
G313 MEGATRON two player tron/light cycle
G314 LEGO-TRIS (not A1200) Good tetris
G315 INTER-LOCK Brilliant 3D puzzle games
G316 GALACTIC Excellent 8 levels arcade
G317 HYPER-BALL Speed ball +level editor
G320 GHOST-SHIP Very good 3D adventure
G325 BATTLEMENT hunch back of Notre
G326 MEGA GAME COLLECTIONS III 3 top Games
G329 MADONNA NUDE PUZZLES for 18+ only
G331 GRAVITY massive space exploring game
G333 CYBER-NETIC Brilliant 8 way blaster
G334 DONKEY KONG (not A1200) classic Arcade
G335 CRAZY SUE II- best platform to date
G342 SUPER SKODA CHALLENGE (& track editors)
G344 STAR-TREK similar to RAID2 but harder
G350 TOTAL FIRES III Very fast shoot em up.
G355 DOODY very cute & extremely payable
G356 WONDER LAND amazing graphic recommeded
G359 WAR FARE SIMULATOR (not A1200) Strategy
G360 TOMCAT vertically scroll shoot em up
G362 DELUXE PACMAN + best pacman ever release
G367 CARD GAMES collection
G368 WIZARD-DOMAINS - dungeon type games
G370 KALATRIZ (not A1200) arcade tetris clone
G373 AIR ACE II Very playable shoot em up
G381 INFERNO I Tetris with a twist
G384 OTHELLO best PD version
G385 BILLY THE DRAGON - shoot em up
G386 MOUSE IMPOSSIBLE very addictive
G389 CASINO GAMES - For all gamblers
G390 TETREN most polished Tetris ever released
G392 STRIKEBALL brilliant base ball clone
G399 TRAILBLAZER brilliant (not A1200)
G400 FIGHTING WARRIOR like street fighter
G404 DOMINOES only one of its kind on PD
G406 TOTAL WARS - strategy-like chess in space
G407 NOVA & DOG addictive puzzle game.
G409 WOT IT NAME QUIZ- quiz (ok it good)
G410 FATAL MISSION Excellent Nemisis clone
G411 BATTLE CAR 2-3D car racing
G422 SERENE II excellent arcade games
G431 NESTER CARD GAME- hours of fun for a quid
G435 ROULETE American roulette, excellent
G438 TRAILBLAZER 2 C64 conversion
G441 ETYPE 2- Simply the best asteroid
G443 OLYMPIAD DISK (2D) Olympic sport events
G445 DESCENDER GAME tank, search & descender
G446 ORLIDOX excellent Arcade/Puzzle game
G448 PARACHUTE JOUST quite playable
G455 CASTLE OF DOOM VG graphic adventure.
G456 DUGEON OF NADRIF R.G.P adventure
G460 WIBBLE WORLD GIDDY Large platform game
G462 COSMIC RACE motorbike with gun
G465 CHESS II Very good chess game
G467 CASH FRUIT- good fruit machines
G478 AMOS CRICKET cricket games
G488 EXTREME VIOLENCE 2 player battle out
G489 ENGIMA MACHINE very challenging puzzle
G490 MEGA BALL 2 very playable break out clones
G491 BOUNCE & BLAST brilliant platform 10/10
G492 ZOMBIES & DEFENDER 2 fantastic games
G494 MERCENERY SIMULATION 3D wars games
G499 LIFE -simulation very interesting
G500 TRANSPLANT the best Asteroid yet
G501 KLAWZ THE KAT-great platform games
G502 DRAGON-FIRE more medieval arcade
G503 DRAGON-FIRE - Gulf war mission
G511 HIGHWAY HELL like SPY HUNTER
G513 BLASTER- kill invading aliens
G531 OPERATION FIRESTORMS - brilliant
G534 CASTLE KUMQUAT similar to Alien breed
G535 BLACK DAWN brilliant graphic adventure
G537 ACK ACK - shoot em up for kids
G538 MORIA 5.4 The latest Dungeon & Dragon
G539 BRIDGE Good version of bridges
G540 ORK ATTACK bloody adventure
G541 REBOUNCE 2 player futuristic breakout
G542 ROAD TO HELL brilliant car racing
G544 SUPERTOM CAT New vertical shoot em up.
G545 KUNGFU CHARLIES mix with platform, brill.
G546 RAID 4 latest vertical scroll shoot em up
G548 QUIZMASTER very good quiz program
G552 ELEVATION games based on lift?
G560 IMPERIAL WALKER - Based on STAR WAR games
G567 STARBASE 13 (2D) Brill like MONKEY ISLAND
G657 AMOS LOADSA MONEY best FRUIT-MACHINES
G659 MR MEN OLYMPIC (2D) many events to complete
G660 4 L.C.D DREAM 4 small hand held games
G664 NEIGHBOUR GAMES (2D) Brilliant graphic
G665 TIME RUNNER (WB2/3) Brilliant graphic
G667 GOLF (2 disks) One of the first PD GOLF
G668 AMOS CRICKET 2 New Amos cricket simulator
G669 MUGSY REVENGE gangster graphics adventure
G672 JIGSAW (2 disks) very playable jigsaw games
G673 BOBBY GARDEN + DIGGER (NEW) Brilliant
G674 HIGH OCTANE (NEW FASTER VERSION) (not WB1.3)
G675 TIME RUNNER amazing graphics adventure
G680 SPACE-INVASION 2 - Fantastic Galaxain
G681 AUTOMOBILES - PD version of SKID MARK brill
G682 BANDIT MANIA - Brilliant fruit machine demo
G685 PROJECT BUZZ BAR - Brilliant asteroid
G687 PARADROID 64 (not A500 1.3) Excellent
G689 GUN FIGHT (not A500 1.3)
G690 THE REAL POPEYE 64 (A500 1.3 only)
G692 SYSTEM DEFEND - Brilliant Defender clone
G698 AMIGA-BOY-Game boy emulator + tetris
G732 DETHELL IN SPACE. Recommed.
G735 OVERLANDER Brilliant arcade MOON ALERT
G737 SERIOUS BACKGAMMON The best in PD BG
G771 STAR WOID (2 Disk) brilliant Thrust
G772 UN-SENSIBLE SOCCER very similar to Sensible soccer games. RECOMMENDED
G773 FROIT MANIA - Brilliant Fruitmachine.
G774 TRICKLE TREAT - like DOOM on the PC
G775 FOOT-BALL MANAGER - new version
G782 SOLO ASSAULT 3D like Wing Commander
G783 SEED OF DARKNESS - brilliant graphic adventure
G784 NANO FLY Superb explore game RECOMMENDED
G785 THE GREAT GOLD RAID - very addictive
G787 ANT WAR V1.9 (LATEST) not 1.3
G788 ZENO-MORPH - Great graphics
G789 TASK FORCE very good MIND SHADOW clone
G790 GREEN FIVE Amazing graphic like FLASHBACK
G791 PROFESSIONAL BINGO CALLER
G792 MARTIAL SPRIT brilliant STREET FIGHTER II
G797 INTENSE like AKAI-WARRIOR in the arcade
G798 6 EXCELLENT CARD GAMES collection
G799 MOOSE DRIVE (A500 1.3 needs 1mg chip ram)
G809 BLITZ 2 fast action shooting games
G810 EXIT 13 Brilliant puzzle
G811 TEMPORAL MISPLACEMENT- graphic adventure
G812 A DAY AT THE RACES - V.Good horse racing games
G820 BOULDER ORIGINAL with 80 levels
G821 BOULDERDASH CAVE/LEVEL CONSTRUCTION KIT
G822 BOULDER COLLECTION 2/3 160 level (2 disks)
G837 BOULDERDASH 80 cave/level
G839 BOULDER PACK 640 BRAND NEW LEVELS on 8 disks, must for all Boulderdash fans
G860 ALIEN NETWORK - new Space invader
G862 BATTLE FORCE excellent text adventure.
G863 GNU CHESS the best chess with 10 level
G868 SWORD OF YIG Graphic adventure
G867 POWER-TETRIS 1 or 2 player Tetris RECOMMENDED
G868 SUPER SMASHING TETRIS very playable Tetris
G870 CHESS II & CHECKER One of the best around must for all CHESS or CHECKER players
G871 GRAVITY FORCE 2 1 or 2 player thrust clone
G872 SCHNEBITZ Commercial quality puzzle games
G875 DELEXE GALA v2.3(new) add new feature & bonus game + 2 player RECOMMENDED. Get it now
G876 THE KRILLIAN INCINDENT like ELITE 2/Epic
G878 QUANTUM - Maze collect & escape type games
G879 RAGS TO RICHES - like MONOPLY
G884 WIPE OUT- mindless blasting game
G885 GODZILLA Another shoot-'em up
G886 SUPER MEGA FRUIT- All new Fruit Machine
G887 STEWARDS ENQUIRY New Horse racing games
G888 DRIVING MANIAC 3D (fill vector like Indi 500) car racing - very fast. RECOMMENDED
G889 PLANET FALL - Luner Lander clone
G890 INTENSE 2 Follow up to part 1 RECOMMENDED.
G891 BUCK TOOTH ADVENTURE Very good multi level shoot/collect em up RECOMMENDED
G892 PENGO 2 - Maze type games. Recommended
G893 SUPER OBLITERATION Blast asteroid very similar to PANG 2 lots of weapons. RECOMMENDED
G894 SUPER INVASION II - New SPACE INVADER
G896 ULTIMATED QUIZ - pub style quiz machine
G897 THE SHEPHERD Brilliant POPULUS clone. REC.

EDUCATIONAL

E001 KIDS PAINT excellent Paint program for kids
E002 COLOUR IT brilliant computer colouring book
E003 TREASURE SEARCH find the hidden treasure.
E004 LEARN & PLAY I (not A1200) many maths & games
E005 LEARN & PLAY II more education programs
E006 SPANISH TRANSLATOR Spanish <> English
E008 MR MEN (WB1.3) brilliant story adventure
E009 ASTROMY tutorial on solar/star etc system
E010 SIMON & SPACE MATHS maths & Simon games
E011 EDUCATION PACK (5 Disks) packed with lots of ed programs ranging from maths to games recommended
E015 DINOSAURS teaches you all about Dinosaurs
E020 WORLD DATABASE requires (2+ meg)
E021 STORY LAND II interactive puzzle games rec.
E022 LANGUAGE TUTOR teaches you 4 languages
E023 TALKING COLOURING BOOK talking Dpaint brill
E024 EASY SPELL II improve your kids spelling
E025 SCRABBLE requires 2-4 players. brilliant
E026 WORDS can help you solve the crossword
E027 OSWALD Very colourful large cartoon game
E030 EVOLUTION breed your own hybrid
E031 IQ TEST + IQ GAMES pack 1 excellent
E033 TYPING TUDOR very good typing tutor
E035 CHESS HELPER help/teach how to play chess
E036 BASIC TUDOR learn about Amiga basic Prog
E038 AMIGA TUTORIAL 7 part tutorial
E039 COMPUTER CARE how to care about AMIGAS
E040 GUIDE TO LOWER BACK PAIN tutorial about the spine & how to avoid back pain. Recommended
E041 KIDS ALPHABET displays all alphabet letters
E042 FRACTION & SILOUEST maths & games, excellent
E043 MATH MASTER teach/test you more on maths
E044 STEAM ENGINE V2 graphics & tutorial
E045 PETROL ENGINE tutorial & animated graphics
E046 GAS TURBINE ENGINE tutorial & anim graphics
E047 STIRLING ENGINE tutorial & anim graphics
E050 DREAM FOR ANGEL explains the meaning of dreams
E051 INVISIBLE WORLD brilliant, recommended
E052 FISH TANK turn your Amiga into a FISHTANK
E054 DEMOLITION MISSION simple game for kids
E055 WORD POWER solve crossword puzzles etc. Good
E056 WORM HOLE simple game, ideal for children.
E057 APPLE CATCHER catch falling apples, brilliant
E058 CROSS MAZE & CRYPTOKING 2 excellent kids games
E059 VERB QUIZ find the word & its relatives. Brill
E061 KING JAMES BIBLE (4D) complete bibles, excellent
E066 TARROT clairvoyance in a instant
E068 GALLOW fancy a game of hangman?
E070 MATH DRILLS teaches all basic maths skills. Vgood
E071 ERROR INFO give info on why your Amiga crashes
E075 WORLD-WAR 2 graphics tutorial on WORLD-WAR releated program eg simulate Starprobe/ moleoube/ etc
E076 SCIENCE an excellent collection of science. Ideal for all who are interested or studying science. Recommended. This pack comes on 4 disks
E080 KIDPRIX great childrens paint program
E081 ASTROMY PACK- This is an amazing collection of programs related to astronomy. Can help to locate certain or star positions etc. Must for anyone who studies astronomy or hobby. Great (4 DISKS)
E073 PICTURE & LETTER learn to read - first step
E074 AMIGA BEGINNERS GUIDE tutorial on Amigas
E085 NODDY PLAYTIME demo. Very good
E080 KID PRIX more excellent paint programs
E081 D.T.P FOR KIDS easy to use, excellent
E092 SING A RYHMES sing a song
E094 HIGHWAY CODE TUTOR questions on highway code
E096 READ & LEARN (2D) THREE LITTLE PIGGY Story with speech & graphics. Brilliant, recommended
E097 BACK TO SKOOL vol 1 collection of the best
E098 BACK TO SKOOL vol 2 an education program
E099 BACK TO SKOOL vol 3 & games. RECOMMEDED
E100 LITTLE TRAVELLER information on world wide
E101 WORLD GEOGRAPHY world with map & text
E103 DISCOVERY OF THE ATOM Tutorial on the Atom (2D)
E104 DESKTOP GUIDE TO MUSIC (3D) guide & tutorial
E107 TRUMPTY FIREWORK ALPHABET Very entertaining way to teach your child the ALPHABET
E109 MR MEN OLYMPIC (2D) many events to complete
E110 CULT TV DATABASE (2D) Info on early TV series
E115 ELETRONIC WORLDS (3D) Complete K.James BIBLE
E116 HOW THE EARTH BEGAN - theory how the BIG BANG exploded and created all the stars & galaxies
E118 WORKBENCH 2 tutorial on Workbench 2
E119 DINO WAR Quiz on dinosaurs
E120 JUNIOR MATHS Great learning aid for teaching kids on the maths subjects. RECOMMENDED
E121 PICTURE PUZZLE brilliant JIGSAW type games
E122 WORD FACTORY Brilliant, teach kids words
E123 KID DISK 1 - Brilliant education pack
E124 KID DISK 2 - more education programs
E125 JURASSIC PARK lots of info on dinosaurs
E126 CHILDREN SONG 2 contains 5 excellent songs
E127 MING SHU (A500 only) Brill Chinese Astrology.
E128 ASTRO 22 PRO.V3 - The latest astrology program that accurately calculates the position of the planets, eclipse, zodiac positions etc. Recommended
E129 KID DISK 3 (DTP) Drawing program for kids
E130 FRENCH VERB TESTER should help you with French.
E131 CULT TV DATA BASE II (2 DISK) info on early TV
E142 KID DISK 5 & 6 - 2 disks full of brilliant games
E148 CHESS & TUTOR - FULL teach you how to play chess
E150 INTERNET - FULL guide to internet & superhighway
E161 CLI & SHELL TUTOR (help) ideal for beginners
E162 DELUXE PAINT GRAPHIC TUTOR V 3 & 4 Recommended
E163 JAPANESE - teaches you the Japanese language
E165 KEYBOARD TRAINER An excellent typing tutor
E167 WORD POWER - spellchecker/crossword solver/teach
E163 CROSSWORD CREATOR - design crosswords
E165 CHESS II & TUTOR brilliant Chess II games
E166 PAINT IT (not A500 1.3) latest COLOURING BOOK
E169 HISTORY OF AVIATION Vol 1 Excellent disk
E171 CHILD FAVOURITE - Education program
E175 FRANTIC GUIDE TO COMPUTER (2D) brilliant & funny
E177 CYBER PUNK 2 for Cyberpunk freak only
E181 SIGNITURE CREATOR customise your own signiture
E182 VIRUS WORKSHOP V4 comprehensive guide
E184 IMAGINES VIDEO 2 disks
E185 WORKBENCH 2/3 GUIDE Online help/Complete Guide to AMIGA DOS commands. Very useful.

EDUCATION PACK

OUR BEST SELLER, 5 DISKS OF THE VERY BEST IN EDUCATIONAL PROGRAMS & 21 GAMES PACKS
SUITABLE FOR ANY AMIGA (A500-A4000) ONLY £4.99

18 DEMOS

Age 18 and over only
X80 CINDY CRAWFORD (2)
X74 MADONNA (SEX) (3)
X01 SHOWER GIRL
X03 BODY TALK (2)
X09 MARIE WHITTAKER
X24 SABRINA SPECIAL
X25 DIE FILKINGER
X28 MADONNA EARLY DAYS
X26 KATHY LLOYD
X30 MEGA-MAID
X31 CALENDAR GIRL
X32 MAYFAIR
X33 UTOPIA (4 DISKS)
X45 GIRLS OF SPORT
X49 PAGE 3 GIRLS
X70 GON GON GIRL
X71 TINA SMALL
X91 Calendar girl 95

MUSIC

M001 BEASTY BOYS-We Want Some Pussy songs
M002 MICHEAL JACKSON-song BAD.
M003 DO THE BARTMAN
M005 100 C64 TUNES (not A1200)
M006 BAT-DANCE REMIXED
M017 GUN & ROSES - YOU'RE CRAZY.
M018 THE XMAS SONG (disk) very funny
M025 MONEY FOR NOTHING-DIRE STRAITS HIT song
M027 BLUES HOUSE (2 disks)
M029 SAFE SEX DEMO - very funny
M031 BETTY BOO (2) needs 2 drives (brilliant)
M058 SGT PEPPER (2D)
M072 MADONNA - hanky panky song.
M084 C64 GAMES MUSIC
M115 MAHONEY & KAKTUS 2 - 40 tunes compilation
M125 ADAMS FAMILY
M147 BANGLE - walk like an Egyptian
M150 TIFFANNY I Think We Alone Now
M171 MADONA - (like a virgin)
M173 JANET JACKSON - RHYTHM NATION
M177 PET SHOP BOYS
M184 SAM FOX (PLEASE ME)
M186 MADONNA (RESCUE ME)
M188 JOE Le TAXI
M189 MICHAEL JACKSON (SMOOT CRIMINAL)
M194 JESUS ON E'S (2 disks)
M205 RAVE - more Rave
M262 A TO Z OF C64 GAMES MUSIC (4) brilliant
M314 DICK TRACY (madonna) (2)
M335 STAR TREK & STAR TREK NEXT GENERATION (2)

ANIMATIONS

A005 FILLET THE FISH long story animation
A013 SPACE-PROBE- in search of Alien life form
A064 THE RUN - Lotus being chased by police
A072 LIFES A BITCH - Hmmm for 18 + only
A138 KYLIES (2) Kylie slide & music. Brilliant
A173 HELL RAISER II - CREEPY horror show
A179 THE LIVING WORLD SLIDE SHOW - creepy crawly
A187 PERIL OF THE DEEP (2) Massive sea creature
A190 TERMINATOR II (2) - Brilliant
A192 NEMESIS COMIC - very good comic.
A208 THE LADY AND THE TRAMP - short movies
A213 CANNON FLIGHT- Brilliant graphics
A215 MADONNA SLIDESHOW III - Must for Madonna fans
A225 ANOTHER 5 WAYS TO KILL A MOLE - Classic
A226 NEW VIZ - Hmm for 18 + only
A230 TOO MUCH 3D - Superb Spaceship anim
A231 ALIENS II - Definitely the best Aliens
A236 WHIZZER + CHIP - for Comic fans
A248 PERVERSE SLIDES - funny but rude
A255 BART SIMPSON MEGA DEMO (3 Disks)
A262 STAR-TREK the Next Generation SS
A288 SATURN FLY BY - Remarkable anim VOYAGER II
A290 CHRISTMAS ANIMATION - Ahhh to late now
A293 MANGA (2) very cute Jap chic & robots demo
A295 MAYHEM ON WHEELS 3-real motorbike/car crash
A306 TORNADO Slideshow
A320 GORE - gruesome Horror
A336 FAST CAR - Loads of fast & inexpensive show
A414 MANGA WORLD 3 - More brilliant Manga Pics
A417 AKIRA X-MEN - more MANGA comic Shows

VIDEO TITLERS/TOOLS

U181 VIDEO NOTE database for your video collection,
U431 VIDEO APPLICATION (2 disks) many video titler prog
U250 VIDEO TOOL (3) loads of video utils. Recommended
U964 TELESUBTITLE - new video titler
U965 VIDEO MAXE V4.33 .The latest in video
U352 DESKTOP VIDEO 1 & 2 (best video titler tool) cataloguing system. Dozens of functions
U671 TELE TITLE 2 - Great new VIDEOS titler
U513 VIDEO TITLER (2 disks) more VIDEO TITLER-BEST
U920 TELESCROLL 2 (not WB 1.3) Easy to use Video titler loads of features
U921 WEDDING VIDEO ANIM (2 disks) Requires D.Paint 3/4. Very high quality
U922 CAPTION MACHINE excellent Video titler
U923 VIDEO MANAGER (Not A500 1.3) Video cataloguing system
U925 Video Titler - very good video titler

U757 150 PRINTER DRIVE

LARGEST COLLECTION OF PRINTER DRIVERS

IF YOU HAVE A PROBLEM WITH INSTALLING A PRINTER DRIVER ON ANY DISK, WE CAN INSTALL IT FOR YOU FOR ONLY £2
JUST SEND A COPY OF THE DISK & STATE WHAT PRINTER DRIVER YOU REQUIRE

PRINTER MANAGER

U427 PRINTER-STUDIO excellent print results
U596 PRINTER TOOL - includes typewriter, spooler etc
U792 PRINT LABELS print disk labels/banners
U793 STAR PRINTER STUDIO - for all star printers
U794 SEIKOS STUDIO - For all Seiko printers more specific printer driver for the above printer
U733 PANASONIC STUDIO - 9 & 24 pin printer driver & util
U734 CANON PRINTER STUDIO not A500 (1.3)
U735 PRINTER STAR 24/200 FONT DESIGNER - shareware
U782 CITIZEN PRINTER MANAGER for all Citizen printer owners containing many useful printer util & drivers
U884 CANNON PRINTER STUDIO -f or all models for use with Cannon printers
U757 150+ PRINTER DRIVER largest collection

STAR-TREK MANIA

IF YOU LIKE QUALITY STAR TREK RAY-TRACE ANIM. THEN THIS PACK IS FOR YOU. 5 DISKS OF STUNNING STAR TREK ANIMATIONS. BETTER THAN HOLODECK SERIES. COMPLETE STAR TREK MANIA PACK. ONLY £4.95. PLEASE STATE AMIGA WHEN ORDERING



TOP VARIOUS UTILITIES

U001 A-GENE help you trace your family tree.
U024 D-LOCKS proctect your disks & files
U027 ULTRAPAINT & SURF paint & 3D model program
U029 CAN DO programming language
U045 DARKSTAR no.2 (vol 2-5) loads of utils
U058 DISK MAG CREATOR create a disk magazine
U117 NORTH C compiler (2) brill programming language
U122 SID 1,6 copy/delete/move file made very easy
U131 TETRA COPY play Tetris while copying disk, great
U135 MOST USED UTILITIES (2) very useful util collection
U145 XCOPY PROFESSIONAL very powerful disk copier
U146 C-MANUAL 2 (4) Teaches you how to program in C
U153 ASSASIGN PRINTER Utilities very useful
U169 PAINT AND ANIMATE still the best
U170 BIORHYTHMS V4.01 display your own biorhythms
U184 MASTER SEKA V1.6 complete Assembler language
U186 UNLIMITED DISK CREATOR all tools on are here
U187 M COMPUTER AID DESIGN - Was commercial product
U188 SHOWIZ slide show maker 24+ wipe effect
U191 SID II copy/delete/move/run file using a mouse
U220 AMOS-PAINT V. good paint package, lots of features
U222 GRAPHICS UTILITY(3) lot of graphic converter tools
U225 AUDIO SOUND TOOL (A500) (A1200)
U226 50+ MOST USE UTIL loads of very useful utils
U229 SLIDE-SHOW CONSTRUCTION KIT easy to make
U240 ARCHIVER TOOLS lots of crunchers
U242 IMPLODER 4.0 disk file compressor. Excellent
U243 The A-T COPIER (not WB3) 13 disk copier
U254 FRACTAL UTIL loads of fractal programs, brill
U257 DISK CRUNCH Compilation not WB 2
U282 LAND BUILDER create realistic landscapes
U284 COPY & CRACK TOOLS back up your software
U287 P.C. Q PASCAL (2 disks) programming language
U300 MESSY SID II read/write PC/MAC etc files.
U301 AUTO DISK LOGGER catalogue your disk
U321 GRAPHIC Util 1 (3) loads of brill graphic utils
U324 GRAPHIC util 2 (3) even more Graphic tools
U333 SCENERY MAKER more landscape generators
U334 EMULATOR COLLECTION II (lots of emulators)
U335 FREE COPY back up commercial games
U337 MODEL 3D Brilliant 3D object designer
U338 MULTI VISION (2) disk/files utilities
U340 HACKER-TOOLS many ripper tools
U350 POOL TOOL - predict horses with the best chance
U351 RACE RATER Similar to above, but both
U358 STAR CAT 2 - create catalogue disk, easy
U359 SEEKER find lost files on floppy & hard drive
U360 R.P.G (2) adventure creator
U363 DISK REPAIR KIT -s alvage & repair damaged disks
U365 SAMPLE MAKER make samples with out Hardware
U367 MUSIC MANIA many version of music maker pro, brill
U372 WORD SORT process ASCII files
U377 NCOMM III more modem software + packer util
U378 DIGITAL ADDRESS BOOK V.good address book
U379 HOT UTILS more amazing utils
U380 UNICOPY fantastic disk copier
U381 GRAPHIC RIPPER (not WB3) plenty
U383 LYAPVNOU GENERATOR- generate space scenery
U384 MED V3.2 (latest) Brill music maker
U387 P-SUITE add colour/animate to text?
U388 SUPER CLI - fast disk, fast load etc. OK
U391 FORTRAN complete programming lanaguage
U392 AMIGA DEX - Good database program + more
U393 UTIL collection of lots of useful utils
U397 FORM UNLIMITED design any type of form
U399 FRACSCAPE V1.2 new fractal similar to VISTA
U400 SOUND TRACKER V2.6 music maker
U401 PLUS ISSUE(not WB1.3) Vol 1-14 each disk pack with various WB2 & WB3 utilities. Recommended
U420 SPEED BENCH (not WB1.3) create auto boot WB
U425 NIB 2 very popular copiers
U436 The RIPPER COLLECTION (not WB3) many ripper programs
U440 RADBENCH recoverable WB (state Amiga when order)
U442 SYSINFO test & print info on your AMIGA sys
U444 FONT FARM font creator/editor/design new fonts
U449 AMOS UPDATE 1.4 add more commands for AMOS
U457 WHOM 2 (3 DISKS) Detail/database on 51 films
U470 FINAL FONTIER 1 (2 disks) Star-trek magazine
U473 FINAL FONTIER 3 (4 disks) Star-trek magazine
U480 HARD DISK CLICK - Hard Drive menu system
U490 B-TEC UTIL - Amazing pack with 207 utilities
U491 PROTRACKER V3 - Best music writer program
U492 WORK-STATION (2 disks WB1.3 only) WB replacement
U495 HARD DISK UTIL brill collection of Hard disk util
U496 EASY PRINT (A500 only) lots of printing utils
U498 WORK-MATE - 15 brilliant disk utils compilation
U501 THE MUSIC CONSTRUCTION KIT (state Amiga owned)
U502 SCORPION MAPPER II Making maps of game levels
U503 PROCALC Super full function Calculator
U504 HOT-STUFF - more util disk compilations
U505 VIRUS-KILLER & DISK RESALVAGE/REPAIRE KIT
U507 DCOPY V3 PROFESSIONAL - Excellent Disk copier
U509 ULT BOOT BLOCK 40+bootblock generator/maker
U510 ULTIMATE BOOTBLOCK Collection II + more
U512 ZIRCON UTIL - 30 MOST USEFUL UTIL 2, briliant
U515 WIT COMPLETE UTIL 20 most used utils
U516 AMOS FRACTAL fractal mania
U521 SPECTRA PAINT III rival to Dpaint
U542 SEA HORSE CHEATS more cheat/passwords etc
U550 SCENERY CONSTRUCTION KIT fractal, recommended
U551 ASSASSIN BOOT BLOCK over 50 bootblock protector
U555 CROSSWORD CREATOR (not WB3) crossword maker
U561 PERM CHECK a full POOL PREDICTION program
U568 ICON CONSTRUCTION KIT icon making program
U569 ICON ready made (4 disks)
U582 DPAINT GRAPHIC TUTOR (not WB3) excellent
U584 NEW SUPER KILLER Regonise & kill 120+ viruses
U590 600 NUMERIC PAD EMULATOR (A600 only)
U591 DEGRADER (not WB 1.3) A500 emulator
U592 KILL AGA - make older programs run on A1200
U600 C64 EMULATOR II util & document
U601 DISKSALV II + ABACKUP (not WB1.3)
U603 THE CHEAT COMPENDIUM for over 450 games
U620 HOW TO CODE IN C (2 disks) + many examples
U622 ACTION REPLAY V1.5 - cartridge on disk
U623 ACTION REPLAY V4 (A1200 ONLY) same as above

Pro C manual V3.0

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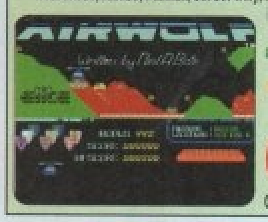
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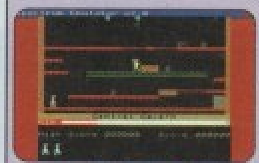
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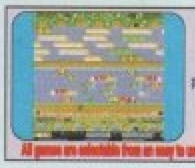
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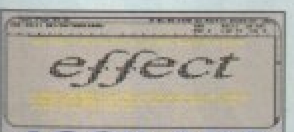
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AGA A1200/A4000

NOTE This AGA listing is for the A1200/A4000 only.

AGA001 EXTENSION DEMO Stunning demo with fast landscape anim and a rotating city, still regarded as the best AGA demo
AGA002 FRACTAL GENERATOR stunning fractal in 256 colours
AGA003 WORKBENCH HACK many hack/toy/blanker ect
AGA006 NEW SUPER KILLER know & kill over 316 types of virus, must for all A1200 owner
AGA007 MINDWARP one of the very first demos for the A1200
AGA008 KLONDIKE DELUXE AGA (3D) Simply the best A1200card games with glamourous ladies as card faces 18 + only
AGA011 SLEEPLESS NIGHTS 3
AGA012 PLANET GROOVE Truly A1200 Demos
AGA013 MOTOR INVADER 2 (2D) Very playable INVADER clone set inside your computer. Loads of fun
AGA015 POINT OF SCALE Great A1200 only demos
AGA016 CHROMAS- Fairly good demo.
AGA017 WORLD OF MANGA AGA (4DISK) magnificent Japanese comic slide show includes Japanes Chick etc recommended. Still the best seller on the A1200—brilliant
AGA021 MAGIC WORKBENCH Improve the look of your WB& add some function to your WB really BRILLIANT
AGA022 WB 3 UTILITIES loads of WB 3 only utilities like degrader etc. Not for beginner
AGA023 U-CHESS the best chess program games so far but requires 4 megbytes. Brilliant graphics
AGA024 WORKBENCH 3 SCREEN Great backdrop for A1200 (not beginner) GIF BEAUTIES is one of the highest qualitygirl Pictures available (1-18)
AGA41 GIF BEAUTIES (1-18) pictures of raunchy women who don't seem tobe wearing many clothes
AGA62 BODYSHOP 1 More of above
AGA64 BODYSHOP 2 (2D) More of above
AGA66 BODYSHOP 3 More of above
AGA68 BODYSHOP 4 (2D) More of above
AGA70 BODYSHOP 5 (2D) More of above
AGA72 BODYSHOP 6 (2D) More of above
AGA74 BODYSHOP 7 (2D) More of above
AGA80 FITCHICK 1 See BODY SHOP for description
AGA82 FITCHICK 2 (2D) See AGA41 for description
AGA84 FITCHICK 3 (2D) See AGA41 for description
AGA90 ASSASIN A1200 FIX DISK 1-Brilliant collection of degrader that should get most of the old A500 games/software to run on the A1200. A must for anyA500 owner just upgrade to an A1200 - RECOMMENDED
AGA091 ASSASSIN A1200 FIX DISK 2 (new) like above but with new collection (different) degrader - recommended you buy both disks - super
AGA094 RELOCKIT V1.4 latest. Run A500 SOFTWARE
AGA097 A1200 UTIL - AGA TESTER, SYSINFO etc
AGA098 ACTION REPLAY V4 Complete ACTION REPLAY on disk.
AGA099 MADFIGHTER 2 brilliant street fighter clone
AGA100 AGA BLITZ SCREEN BLANKER
AGA101 FAST GIFF 2 display GIFF pics in Workbench.
AGA102 AGA DIAGNOSTIC - NEW system tester
AGA103 BLACK BOARD AGA decent image processor
AGA104 REND 24 Similar to above
AGA105 QUICK GRAB AGA - can grab AGA screens
AGA110 WORLD BEYONDS 1 (3) stunning 256 COLOUR fantasy art. Leaves Atari users breathless
AGA114 SMELL LIKE CHANEL NO5 Brilliant demo raytrace pictures ever released on the A1200
AGA121 MAGIC FACTORY 1 STAR TREK (5 disks)
AGA133 AGA UTIL v1 AGA util compilation
AGA134 AGA UTIL v2 more AGA util compilation
AGA135 AGA UTIL V3 more of above
AGA136 AGA UTIL V4 even more of above
AGA137 IMAGE PROCESSOR IFF picture processor.
AGA138 MULTIBOOT- 4 various versions A500 EMU
AGA139 WB3 HARD DISK PREF & INSTALLER installing WB 3 /pref/etc on the hard disk
AGA140 CROSS DOS PLUS v5.1 read/write PC files
AGA141 FARRARI ART 2 (2D)- load of Ferrari & ray trace
AGA142 SUPER LEAGUE 3 - latest manager games
AGA144 SPEAK & SPELL - educational software for kids
AGA145 BIG TOPS (18 + only) Hmmm
AGA146 KELOG LAND - brilliant platform games - get - a must
AGA150 ACTION REPLAY V5 - NEW UPDATE TO V4
AGA160 GIGER TRIZ very playable 256 colour tetris
AGA162 FATAL-BLOW new STREET-FIGHTER 2 clone
AGA164 CINDY CRAWFORD Vol 1 (2 disk) latest release
AGA166 INFESTATION (3 disk) The ultimated AGA demo
AGA170 CINDY CRAWFORD Vol II (2 disks) amazing
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AGA174 MAGIC WB EXTRA vol 1 & 2 (2 disks)
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AGA189 FRIDAY AT 8 other brilliant AGA demos
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AGA192 ALIEN FRENZE 2 player blasting + power up
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AGA202 RAM JAM 94 It can be done (2 disk)
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AGA204 COMPLEX ORIGIN 2 disk requires 2 disk drives
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AGA210 CHANEL Z DISK MAG (2D) A1200 disk magazines
AGA220 KLONDIKE NEW CARD SET (7disks)
AGA230 LOVE 2 disk - simply brilliant
AGA231 AGA UTIL 7 & 8 (2 disks) more util
AGA234 KNOTTY Stunning AGA sliding picture puzzles
AGA240 LOTTERY WINNER hopefully will improve your chances of winning a jackpot. GOOD LUCK
AGA241-258 AGA GAME-GALORE AGA 01-18 We stock the entire collection of the AGA GAME GALORE each disk pack with quality AGA compatible games. RECOMMENDED
AGA251 PACKMAN AGA - the best pacman yet
AGA252 ROCKET PD - Super thrust clone brilliant graphics for 1 or 2 player
AGA253 REAL DEMO stunning special effects
AGA254 DIRT AGA Brilliant 256 colour effects
AGA255 DELIGHT EXPLORE excellent demos
AGA256 KEFEREN AGA Demo lots of effect
AGA257 MINOMIST RAVE great rave music.
AGA258 OXYGENE Fantastic demos
AGA259 INTELOUT another very good demo
AGA260 SOME JUSTIC 94 Demo of the month, brilliant whirl effect. RECOMMEND
AGA262 TO THE DEATH very good STREET FIGHTER clone with very good graphic.
AGA263 GEORGE GALAXO (2 disks) brilliant multi-level shoot/platform game. RECOMMENDED
AGA265 MISSILE OVER ZENON (2 disks) Brilliant 3D missile commander with fantastic graphics
AGA266 TEAM HOI DINO PLATFORM excellent dino platform. Note: this disk was a commercial game
AGA268 TEAM HOI SAGA. The Final chapter (3 disks). The ultimate in demo, comes on 3 disks
AGA269 RAYWORLD (3 disks) very impressive
AGA270 CREAM DEMO - lot of 256 Vector effects
AGA273 EMPTY HEAD lots of vector/ ray trace
AGA274 MUSIC 2 SURVIVE 2 disks 8 excellent music master pieces. Well worth getting
AGA271 RAVE MAXIMUM OVERDRIVE II (2 disks)
AGA278 CHANNEL Z ISSUE 1 (AGA) (2 disks) AGA base disk magazines. RECOMMENDED
AGA279 AGA Utilities including Cache X, Superduper V3, New Menu 2 etc. RECOMMENDED
AGA280 CHANNEL Z issue 3 (2 disks) AGA disk magazine - get the most out of Dpaint
AGA282 CHANNEL Z issue 5 (2 disks) AGA disk magazine topic. Demo/music
AGA285 WORKBENCH BACKDROP VOL (5) Stunning AGA backdrop for WB
AGA286 SPECTRUM EMULATOR V1.3 AGA Latest Spectrum emulator for AGA only



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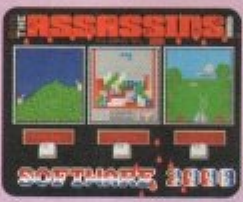
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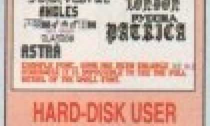
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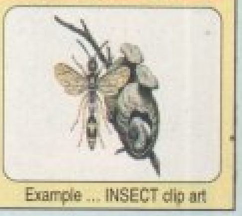
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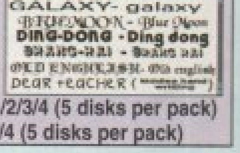
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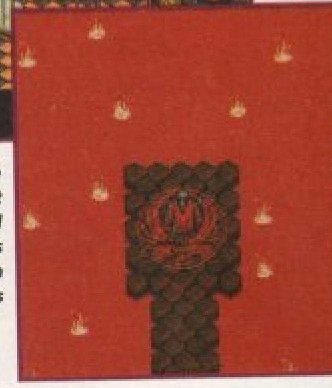
INTRODUCTION

Calling all potential dragon-slayers, budding sorcerers and muscle-bound warriors! Those with a penchant for all things wizard and wonderful can try their hand at Core Design's latest adventure, Dragonstone.

If slaying Orcs, talking to wizened old women and finding strange objects in return for even stranger objects is your bag, then don your best RPG trousers and follow me to a faraway land.



Some of the graphics work well, showing a detailed and attractive environment...



...whereas some don't, and put graphical advancements back about ten years

Publisher: Core Design
Developer: In-house
Disks: 4
Price: £29.99
Genre: Adventure
Hard disk install: No
Control: Joystick
Supports: A500/600/1200/4000
Recommended: 68000 upwards

Dragon



The many monsters are both unimaginative and extremely irritating



The inventory is easy to use and carrying out actions is simple

STORYLINE

Unlike most of these sword and sorcery adventures, this doesn't have a long background tale to go with it. So far, all you know is that your spirit has been cast down from some unspecified location for no particular reason and as yet your mission is unknown. How's that for motivation?

Oh well, story or not, it all results in much the same thing: Wandering around in some 'time past' scenario, killing club-wielding Orcs and solving the puzzles. But as the game progresses the story is revealed.

First of all you find yourself in a forest and it soon becomes apparent that monsters must be slayed, characters talked to and strange objects collected in order to keep them happy. Then it's off to face the real bad guys and to find out how your soul has got in this terrible mess.

FLASHBACK

Dragonstone has more than a passing resemblance to Darkmere. This is Core Design's previous RPG, a 3D isometric adventure which employs a similar graphical style. However, Darkmere is far more detailed, less dated in appearance and has a great deal more to it than Dragonstone.

Gremlin's Legacy of Sorasil is another title in this genre but again it seems to offer a good deal more both in terms of graphics and playability. It also had atmosphere - something Dragonstone lacks.

There just doesn't seem to be a lot of depth to Dragonstone compared to other games of a similar nature. Gameplay needs to be a lot more varied to hold lasting appeal.

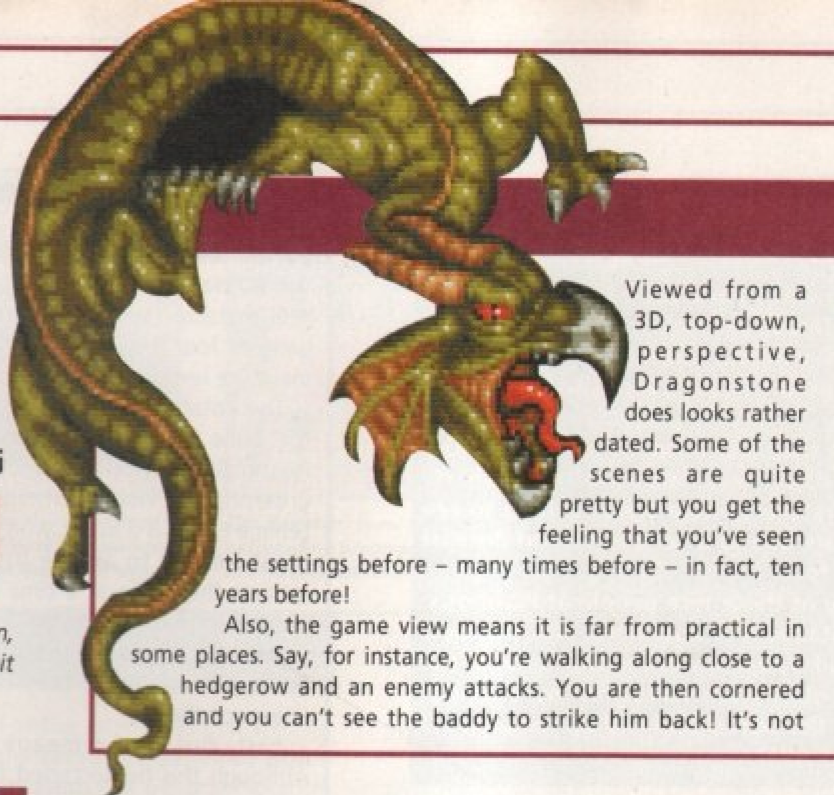
Compared to some of the other traditional adventure titles we've seen recently this looks very quaint and the puzzlers are just too few and far between.



The monsters attack from all angles and you don't really stand a chance



Teleport from the levels using the magic scroll



> **Never laugh at live dragons**
>
> *J.R.R. Tolkien, The Hobbit*

GRAPHICS

Viewed from a 3D, top-down, perspective, Dragonstone does looks rather dated. Some of the scenes are quite pretty but you get the feeling that you've seen the settings before – many times before – in fact, ten years before!

Also, the game view means it is far from practical in some places. Say, for instance, you're walking along close to a hedgerow and an enemy attacks. You are then cornered and you can't see the baddy to strike him back! It's not entirely bad though. Some of the graphics portray the scenes well, the forest, for example, or the dwellings of the mysterious characters. Small touches like roaring fires or even the flickering of torches work nicely in evoking a rich atmosphere.

However, some of the other scenes are just far too clichéd. For instance, the burning pits of lava scene, shown as a bubbling red pool with white splodges. Convincing? Hardly!

And as for the monsters – they're quite laughable. The white mud-monsters squelch at you, looking like extras from a Scooby Doo cartoon, fire-spitting plants extend their 'menacing' tentacles out of the water, and missile-launching gargoyles add to this motley collection of ridiculous looking baddies.

33%

stone

Mysticism, magic and the mighty forces of darkness. A realm of enchantment or clichés? System sorcerer takes a look at Core Design's latest RPG.



The storyline is revealed as you go along



The dragon boss requires timing rather than actual skill

SOUND

In the main, the sound is quite reasonable. A moody, dark tune works well as an introduction to the game and sets up an eerie theme. Background atmospheric sounds such as the peaceful forest are created by the use of bird song, or the howling wind and rippling water used in the Temple of Water.

However, the main character sounds rather unconvincing to say the least. He/she yelps and wails pathetically at every opportunity, all in a rather feeble, 70-a-day sounding grumble. This becomes irritating and you end up turning the volume down which is a shame because you then lose some of the good atmospheric effects.

Sword swipes, monster yelps and pitiful dying noises didn't do a great deal to help matters either. Yes, there was a good background atmosphere present but I've heard a lot more stronger and covincing attempts.

37%

OPINION

42%

Traditional RPG adventures aren't everyone's cup-of-tea, but a good one can sell in abundance, bringing in an audience that would normally be disinterested in the genre. Dragonstone, however, just doesn't have the elusive qualities to make it stand out.

Graphically it's pleasant enough, as is the sound, but unfortunately the game lacks any real depth because the gameplay mainly revolves around enemy-slaying and avoiding obstacles. The fight sequences become so unbelievably tedious and turn it into more of a hack-'n'-slash game than a brain-teasing puzzler.

Every corner you turn you seem to be battling continually with monster after monster and without any warning they seem to corner you from all angles until, inevitably, you die. More puzzles and less of the hit-and-miss battles would have improved things greatly.

In its favour though, the game does have a Password System – although the words are just so ridiculously long they defy belief – and it does have a user-friendly interface, making the actions easy to carry out.

I suspect this game would be more suited to those new to adventures. It doesn't have the usual thick accompanying manual (a mere three pages, in fact), there are no taxing magic spells to work out and the puzzles are fairly logical. If you take the game at face value you can derive some fun from it. It was quite addictive for a while but memories of all the tedious monsters put me off returning for another go – the reappearing enemies would drive even those with saintly patience up the wall.

Those that class themselves as die-hard adventure fans might want to give this a try, especially if it's a slightly old-fashioned, straightforward RPG adventure they want.

However, I don't see that this will attract much more than a casual glance from a generation of gamesplayers that have come to expect high-tech graphics and up-to-the-minute playability.

Lemmings. Bloody Lemmings! Can't people just let go. Isn't it time we put them to sleep forever, time they jumped off that big cliff in the sky, time for Psygnosis to stop producing games featuring those pesky rodents who are extremely proficient at committing suicide?

The answer to all the above questions is a resounding "No!" Why this reply? Well, due to public demand and the fact that the Lemmings series of games have sold like proverbial hot cakes, Psygnosis have decided to release yet another puzzle extravaganza.

Don't get me wrong, I'm not whinging about it, in fact I'm quite happy that another Lemmings game has appeared, but my mind unfortunately wanders back to Lemmings 2: The Tribes. This follow-up was a huge

INTRODUCTION

disappointment to me. I felt the creators had tried too hard and unknowingly changed the original winning formula beyond repair – and perhaps their ideas were just a tad too ambitious.

Despite this criticism from myself, the game did damn well in the software charts and punters everywhere were rushing to see their doctors due to a serious second dose of Lemmings fever.

Courtesy of those nice people at Psygnosis, a third instalment is now here. Will this new set of suicidal adventures reclaim some of the Lemmings glory from years gone by, or will it suffer like the sequel and end up jumping off the nearest cliff?

ADDITIONAL INFO

The All New World of Lemmings contains a set of new characters who aren't actually Lemmings. This gang of four inhabit the various islands and thus make the levels a lot harder to complete.

The Potato Beast attacks the suicidal heroes of the game and should be avoided at all costs. The Psycho Buzzard plucks the heads off its helpless green-haired victims whenever they walk past. Lemme Fatale is a mimic who appears as a vision of great beauty to all the little Lemmings – she attracts them one at a time and watches as they commit suicide by blowing their brains out. These sequences are fairly graphical, but you'll find yourself laughing as they tend to appear quite unexpectedly.

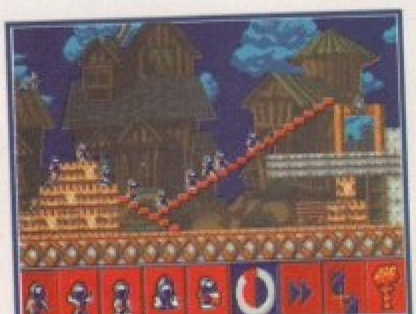
Last, but by no means least is the Mole. Although this bespectacled fellow isn't pure evil, he does tend to cause you a lot of problems. He doesn't harm the Lemmings, but instead digs all over the place ruining some of your best laid plans.

The mole can be useful to you though. Build bricks in front of him and you can make him dig where you want him to. The inclusion of these new stars is a nice touch and it shows that the creators haven't become too over ambitious this time around.



Not everything's the same on the Classic levels – the control system is now slightly different, but not so you'll notice when you get into the swing of things

The All New World

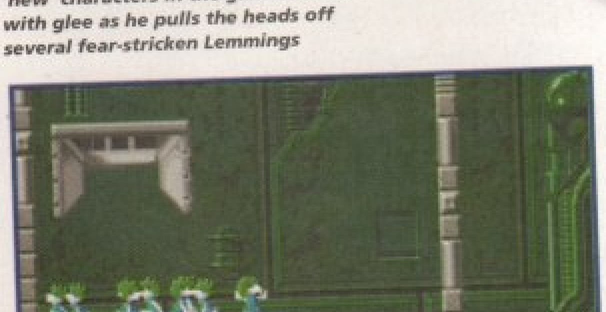


The ninja Lemmings aren't particularly ninja-like. They're pretty good at sneaking around, but I don't think they're ready for the Milk Tray advert just yet



The Psycho Buzzard is one of the best 'new' characters in the game. Watch with glee as he pulls the heads off several fear-stricken Lemmings





The mere sight of a gorgeous lady Lemming is enough to send these boys into raptures, only for them to end with their brains spread all over the place

SOUND

Although it's by no means a musical spectacular, the sounds contained within Lemmings 3 are considerably improved upon what your ears heard in the previous titles.

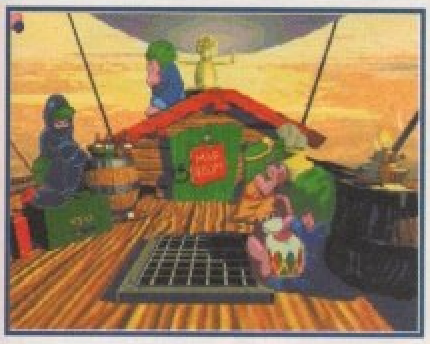
The menu music is suitably 'menu-like' and comes across as some kind of tribal theme – appropriate as you control three Lemming tribes in the game.

Each tribe has their own set of themed musical compositions. The Shadow Lemmings have a set of spooky, atmospheric and mood-filled tunes which perfectly match their sneaky behaviour. As a nod and a wink back to the past, the Classic Lemmings wander around to the jingles from the original game, although this time around they've been improved and have become much more up-beat.

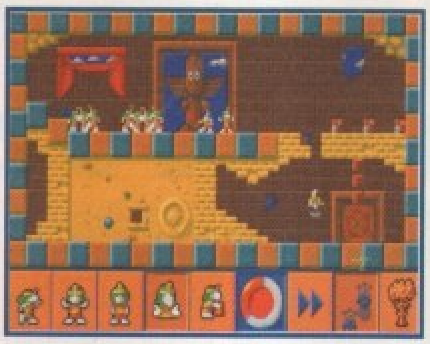
The Egyptian tribe music is, ahem, not very Egyptian like, but sounds very similar to the menu theme. This is not a huge problem and I could be accused of being petty, but it would have been nice if the music had been kept at the same standard.

Sound effects within the puzzle-filled adventure are few and far between. Whenever a Lemming makes it to the level exit, he/she joyfully shouts "Yippee", and before you decide to nuke them all they shout the now infamous "Oh No!". There is the odd smattering of speech here and there, but apart from that there isn't too much to brag about in the noises department. The music is quite good, although it's far too cheesy for my liking.

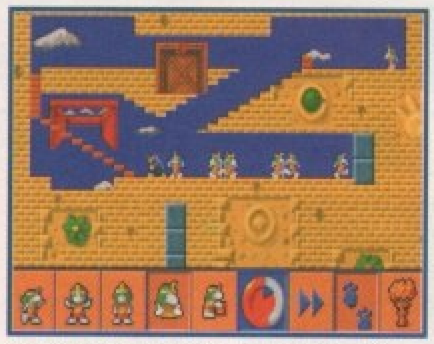
70%



The menu screen (set upon the Lemmings ark incidentally) lets you load/save games, practice, and select one of the three tribes



The Egyptian level may not have an astounding accompanying soundtrack, but at least, graphically, it looks the part



A few Egyptian levels later and the tribe bumps into one of the many creatures which inhabit the island.



The Classic levels faithfully reproduce the look of the original, but everything seems to have been enhanced and improved

GRAPHICS

The first thing you'll notice as soon as you start to play are the sprites and backdrops contained within the game. It looks very much like the graphics from the first foray into Lemmingsville, but somehow it's altogether different.

With ruler in hand and a quick measurement later, my theory was confirmed. The various pixels in this new piece of software are larger than the ones seen in previous instalments. Coo!

A second look at the screen and not only are the Lemmings themselves bigger, but they've been animated far better. It's probably due to the new size of the graphics which enables the artists to include a lot more small, but important details.

There are three tribes to play around with; Classic, Egyptian and Shadow. Each tribe is stylised and although all the Lemmings tend to do the same things (i.e. build bridges, dig, etc.), there is a distinct difference between the three tribes.

The classics have still got that infamous 'bouncy' walk, but the Egyptians perform a traditional 'sand dance' while the Shadow (ninjas to you and me) tribe sneak around on tip-toe as if they're about to appear in an episode of Mission Impossible.

Not only have the sprites been given a new lick of paint, so too have the various backgrounds. You only have to take a quick glance at the screenshots to see how well they've improved over the previous Lemmings incarnations.

Overall you'd have to say that this new version beats the others hands down when it comes to the graphic side of things. The whole look of the game hasn't changed that drastically from the original concept. Instead it's been given a good spring clean and everything you see is bigger and better than anything that's gone before.

88%

The green-haired rodents have returned and they're still looking to top themselves at every possible opportunity. Jonathan Maddock puzzles his way through yet another suicide marathon

of Lemmings

Publisher: Psygnosis
Developer: DMA Design
Disks: 4
Price: £29.99
Genre: Puzzle
Hard disk install: Yes
Control system: Mouse
Supports: A500/600, A1200/4000
Recommended: 68000

OPINION

88%

It's been quite a few years since I last played Lemmings and after playing the All New World of Lemmings for the last couple of weeks I didn't realise until now just how much I had missed those pesky rodents and their infuriating puzzles.

There are still some annoyances though. When you 'nuke' your tribe, there are (not very good) explosions all over the place, but then disaster strikes as the screen fades to black far too quickly. What happened to the mass pixelated destruction which appeared in the original game?

The control system is still very similar to the original one, but there is a big difference. Instead of having dig, swim, build and float icons, the game substitutes all those activities for just one action icon. If a Lemming picks up an item, he keeps it until he dies or finds the exit. This might've caused a problem because all the Lemmings look identical, but luckily this fear of mine was suppressed.

With a quick stab of the right-button on the mouse, the garb that the Lemming is wearing changes colour, making it much easier to see him among his identical chums. This new control system takes a bit of getting used to, but thanks to its simplicity you'll soon be back on a Lemmings rescue mission.

If, by the way, you detest Lemmings in every possible form and dislike the idea of having to actually make your brain solve a puzzle, then this particular piece of software is not for you, in fact put this magazine down right now and go away.

AMIGA GOLD AWARD

Anyone who played the original game and liked it will love to get their hands on a copy of Psygnosis' latest offering. It's what you might call a conglomeration of old and new. The old being the original and incredibly addictive gaming concept, the new being the advances in graphics and sound. These two elements combined make for a rip-roaring action-packed 90-level puzzler that just gets better and better the more you play.

The All New World of Lemmings will make you cry when you lose a Lemming, it'll make you smile when you complete a level and it will even make you shout in anger when you mess up a level due to your lack of dexterity with the mouse. Quite simply, Psygnosis have come up with an emotion-filled puzzler that will delight any Amiga gamer with a fondness for those suicidal, green-haired Lemmings who just don't seem to go away.

On that subject, you'll notice that this game only contains three tribes. Well, don't, or maybe do fret because they'll be coming your way soon in the shape of three cash-sapping Lemming adventures featuring all the other tribes. It does seem that with these releases the Lemming phenomena will carry on going from strength to strength.



INTRODUCTION

Psygnosis, not content with bringing out the third in the Lemmings series this month, are also releasing their latest offering for the CD32. Originally written for the Mega Drive, Flink is now here boasting 'better graphics' and a musical score that utilises the CD32 for all it's worth.

Although, at first glance, all seems to be the usual platform stuff, there is a lot more to it than meets the eye.



The characters in the game have been created well to bring humour



The map allows you to re-enter levels to pick up magic energy or spell ingredients



Collect various ingredients to make the spells, such as a 'Quick grow' spell, or a 'Demon' spell which summons a protective demon

STORYLINE

Imagica Island – a place filled with sunshine and peace-loving folk who like nothing more in life than to cast helpful spells. Life is all very pleasant until Wicked Wainwright, the evil wizard, gets a bit nasty, captures the four wise rulers and takes over the Island. Unfortunately for the wizards he also takes their spirits, bundles them into four crystals and scatters them throughout the island.

Wainwright also causes a few pollution problems with his volcanic HQ which gives off black smoke. All is lost, until: Enter superhero (fanfare please) Flink. Granted he doesn't look much like a hero but he's an apprentice wizard – so it's a start.

It's down to him to clear the clouds, find the magical ingredients to cast spells and recover the crystals. He can then face Wicked Wainwright and recapture the Island for the forces of good.

Flink

FLASHBACK

Platformers always raise cynicism whenever they are mentioned. However, what Virgin and Disney have achieved with their latest releases has to be seen to be believed and has contributed a great deal in showing that platformers can be a respectable thing to play once again – even if you are over 15!

However, Flink probably doesn't have the wide appeal that would reach an adult audience. It is perhaps a little 'twee' for a more cerebral gamesplayer's taste, but for a younger player I couldn't recommend this highly enough.

It maybe doesn't have the charm of some of the latest releases or the huge amounts of wit that some have, but it more than compensates with inventive gameplay that would be ideal for introducing a child to the rudiments of computing.

SOUND

Again the rather cheerful standard platform tunes are used. They're not all that original but work well with the gameplay and surprisingly, they don't grate on the nerves. There are 16 tunes in all, and each varies from the more dramatic 'beat-the-clock' types to the light and jovial.

Actual effects are varied and for nearly every action there is an appropriate sound. Forty six different effects are used from splashes of water to springs, and there are also the usual 'boings' and 'twangs'.

70%



There is a good range of baddies that all require different skills to defeat

GRAPHICS



Graphically, Flink really holds some nice surprises. Although it is not perhaps the most original of games, especially with the design of the sprite or some of the enemies, it came across as a particularly polished effort. Consoles have pretty much ruled the roost as far as good-looking games go, and it's nice to see that the CD32 is getting a look in.

Animation, from the smallest enemy to the main sprite, is smooth and goes a long way in bringing humour. For instance, when Flink creates the wrong spell the cauldron picks him up and knocks his head from side to side in a typical show of cartoon violence – complete with stars around the head!

The backdrops, though, are by far the most impressive feature. Beautifully illustrated scenes have been cleverly constructed to create the make-believe island of Imagica. Foreground detail shows pretty much what you'd expect and contains all the platforms essential to the gameplay, but the scene fades into the distance and uses many layers to create depth.

So rather than having just background and foreground features, there is a wealth of different details that give a wonderful impression of the many settings. These include mysterious forests, lakes and woodland tree tops.

90%

PLAYABILITY

The different elements all combine to make a thoroughly enjoyable game. The platform sections have been designed well to test both joystick dexterity and careful co-ordination. Puzzles are introduced in the form of magic spells – you collect various ingredients and as you find the scrolls they inform you of how to create certain spells. This works well and will ensure longevity.

A map system means you can revisit levels to collect extra magic energy and spell ingredients. Certain spells allow access to other parts of the world, such as a Spirit world spell which allows Fink to visit a metaphysical world, or a Shrink spell



The methods of getting to other levels change, such as teleportation, and add variety

that can make him small enough to get into a secret zone – therefore, the game can be played in many different ways.

As every platform fan will know, 'collectibles' are an integral part of the gameplay. This game uses treasure chests that can be found and broken into, and will contain a collectable like a Scroll – some of these contain information, others will tell you how to perform spells. This is a much better idea than having to keep referring back to a manual.

The magic objects need to be collected from the thieves, but they have to be caught first which makes a nice change from having to simply collect them. Other enemies need to be disposed of too either by being jumped on or by throwing objects found in the scene, such as rocks or treasure chests.

Platform days are here again courtesy of Psygnosis. But will it refresh the parts other platformers have failed to reach or just become another cash-in on a tried and tested formula? Tina Hackett takes a look

- Publisher: Psygnosis
- Developer: Erwin Kloibhofer
- Disks: 1
- Price: £14.99
- Genre: Platform
- Hard disk install: N/A
- Control: Joypad
- Supports: CD32
- Recommended: N/A



Not all the creatures are against you – they can be helpful. Hitch a ride on a passing gorilla!



The character may not be particularly original but the animation works well

OPINION **66%**

AMIGA BRONZE AWARD

At first glance it is easy to dismiss Flink as yet another cutesy platformer. To some extent this is true but it has been created with such fine attention to detail that it really stands out among other games of this type. To see a platformer of this quality for the CD32 is a good sign and will be a great step forward in bringing the machine to a younger audience. Even for the older platform fan, this offering is of good enough quality to think about buying.

Considering the game is available for a mere £14.99 and there are a massive 52 levels to get through, this has got to be value for money. The game has a good learning curve and, while being taxing, it doesn't have some of the highly frustrating elements found in some platformers.

All the features work well, from the gorgeous graphics and the sound to the addictive playability. Don't expect to have your flabber gasted in the originality stakes, but for a good example of a platformer you should give this a try.

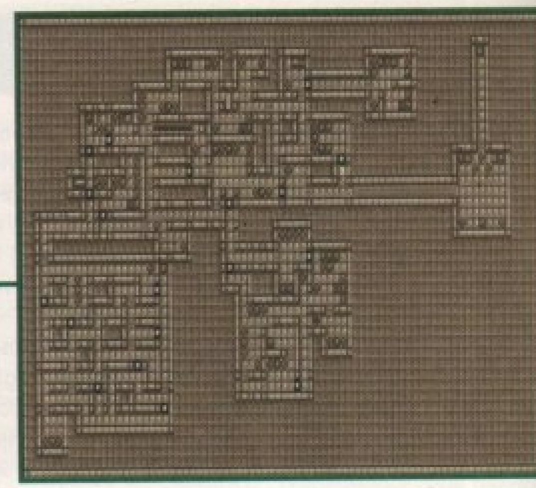
INTRODUCTION

The original Valhalla was met with a mixed reception when it was first released. There were those who loved it and those who absolutely hated it. And then there were those who just weren't sure – me included! While I appreciated the skilful programming, the original idea and the fact that this was the developer's first project, at the same time I couldn't help but find it extremely irritating.

And now it's back in the form of a 'before the war' prequel – in other words, it takes place before the original. It's not actually the proper follow-up though, more a four level special edition to keep fans happy in the meantime.

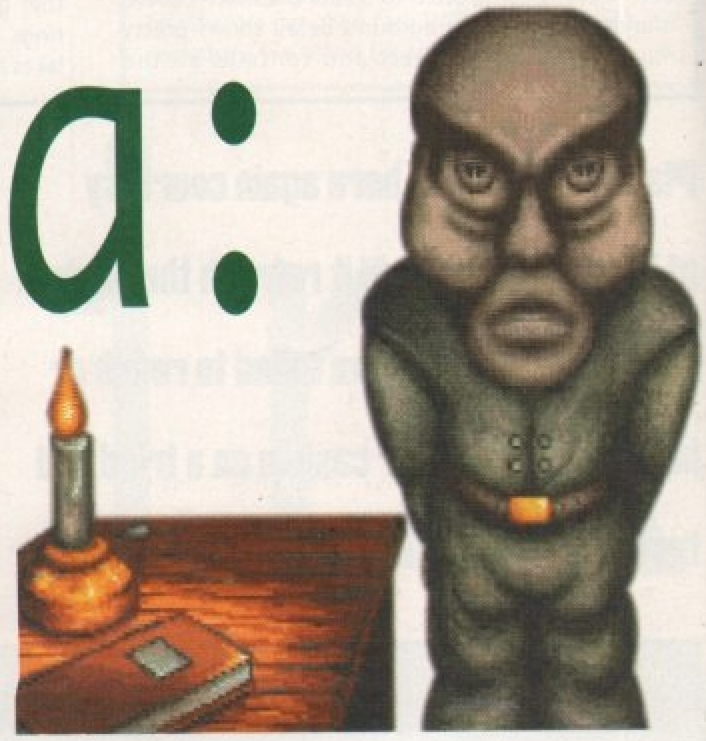


The four levels are all contained on their own disks so we're not subjected to lengthy disk swapping



The map system would have been a helpful feature if it was clearer

Valhalla: Before the war



It's Vulcan Software's follow-up to their renowned speech adventure. But is it really 'good to talk?' Tina Hackett says what she thinks

STORYLINE

Infinity was the bad guy that started all the trouble in the original, but this time round you get to play things from his point of view. The trouble starts because Infinity was born too late to be king and now he feels it's time to wreak revenge on his brother who has been favourite for too long.

However, in an amateur psychology profile, Infinity isn't really bad, just misunderstood, a victim of society who has suffered as a result of his brother's popularity.

So the fact that he is now plotting to kill him off in an attempt to get the throne is okay then is it? Right, fine.



There are characters to interact with – only they don't really have any character!



Books can provide vital clues, so when you collect them make sure you read them too

SOUND

The main feature of this game is the speech. Fortunately, being a different character, the voice has been changed so that it is deep and slow, so it's slightly less irritating – but not much. Call me awkward but I really don't find repetitive whinging at all endearing. I'm afraid this grated on my nerves just as much as the original.

Yes, it's all a very clever concept and it does make a nice change to a textual adventure, but it is still annoying. Ney, it is nothing short of rude, in fact. Who needs verbal abuse from computer sprites? In parts he tells you "Don't be stupid." The rest of the time he grumbles and moans, such as "I hate this castle" or "My arm hurts". It's not amusing, it doesn't enhance the game and it bored me no end.

Thankfully, you can limit the sound to merely the essential phrases but then why buy a speech adventure in the first place? There is an impressive amount of speech involved – 4,250Ks worth and over 1000 words – but in some places you have to replay them again and again before you can make out the meaning. Then the character has the nerve to turn around and say "You know what this is" or "I've seen this before." Yes, I know. But if he could speak with some clarity for a change it would make a difference.

The background sounds are good, though, and add to the atmosphere of the game. Dramatic footsteps pound the corridors, water ripples, and birds tweet in the background. It's all the usual stuff but brings a nice touch to the proceedings.

30%

GRAPHICS

Vulcan Software have already established a very distinctive graphical style for their games. Valhalla and the Lord of Infinity, Valhalla: Before the War and their Timeslip game, which is in development, all have this similar look.

Colours are limited to very dark, murky shades and although this sounds very bland, it works well. They create a very foreboding atmosphere which is adaptable to different scenarios. The characters aren't that great though. They do speak in time due to Vulcan's Lip-Sync engine, which is something, but they don't really have any character or charm.

The top-down perspective has been used again and gives a good 3D look, but it's not without its fair share of problems. For example, sometimes it's hard to see what an object is, or whether an object is collectable or part of the set.

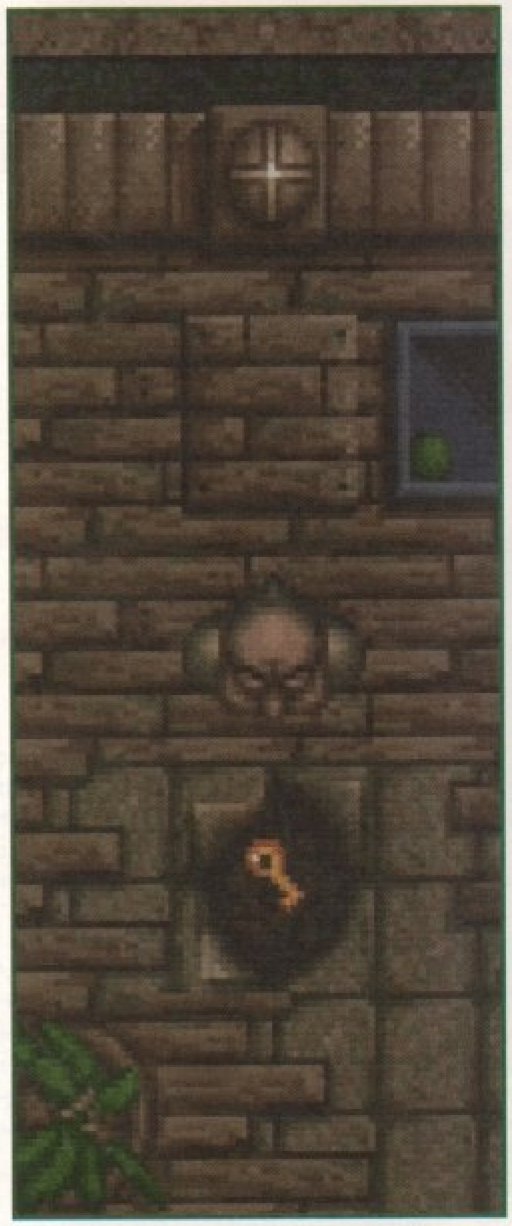
67%

PLAYABILITY

The game is based around the idea of puzzle solving. You find objects, interact with other characters and make the various connections with the clues. This is one of the elements that worked well in Valhalla: Before the War. They are all fairly logical and take more working out than the original, so it will provide longevity.

The icon system works well, especially as it is joystick controlled. However, I would have liked to have been able to pick up an object and be told what it is rather than have to pick it up, click on the object and then click on the look icon. It's a small point but it makes a difference.

- Publisher: Vulcan Software
- Developer: In-house
- Disks: 6
- Price: £34.99
- Genre: Adventure
- Hard disk install: Yes
- Control: Joystick
- Supports: All Amigas
- Recommended: 68000 (1mb required



Okay, isn't it about time there was something more original about the puzzles rather than the old 'find the key to unlock the chest' scenario



Infinity's lumbering gait complements his sluggish speech



Vulcan's particular graphical style is apparent once again



The majority of clues have been well thought out to provide logical but taxing puzzles

FLASHBACK

When Valhalla was released it created a new game type – it wasn't the usual type of adventure, or a puzzler or a platformer. Despite its faults, it brought forward a new style of gaming and it was original at least! So how do the two compare?

Well, to be honest, in design they don't differ a great deal at all. Graphical style is very similar, the icon system identical and the basic principles the same. The main difference is the speech. Whereas the first had something closely resembling Porky Pig on acid, we now have the opposite. More the Incredible Hulk on hash.

Now though, if you don't like the speech at least you can limit it to only the essential phrases, but this is pointless as it is meant to be a speech adventure – the game's main selling point! You can actually skip all the storyscreens and credits this time which is a welcome addition once you've seen it a couple of times.

Compared to other adventures like Simon the Sorcerer or Monkey Island that have wit, humour and charming graphics, I'm afraid I would quite happily sacrifice the speech for one of those games. It tries to be funny....but fails.

OPINION 45%

I must admit I'm very cynical. The idea was fine as far as it went...last time. There are people who loved the original and who will love more of the same. But for the average gamesplayer that's looking for a new adventure title, £35 for four levels is hardly the bargain of the year, especially as this isn't really the proper sequel – only something to keep you happy in between!

I don't know whether they expect fans to fork out this amount of money now and then fork out another lot in a couple of months for the sequel or what, but it leaves me feeling very dubious. If you enjoyed the original you'll like this – it's more of the same thing.

To it's credit, all the levels are cleverly contained on separate disks so there's no swapping between levels. It's also hard disk installable and the puzzles did work quite nicely. But for me – and a lot of people in the office who kept telling me to turn the volume down – it just became too irritating.

It does leave me with the slight problem of how to mark this. I gave Valhalla and the Lord of Infinity 58 per cent and this does have some improvements. However, the price and the fact it's only an in-between edition makes me inclined to lower the mark significantly. And inevitably it loses its novelty value. For true Valhalla fans – who just happen to have £35 begging – only I think.

INTRODUCTION

The fusion between the big and small screen is rapidly becoming closer and closer. Unfortunately, people within the industry, who should know better, are plying us with all manner of CD rubbish. These titles feature famous actors and actresses backed up by lavish graphics and sound, but they're sadly lacking in the gameplay department and are about as 'cinematic' as Uncle Wilbur's slides of his previous day trip to Bournemouth.

Luckily for most Amiga owners, the majority of this software is currently doing the rounds on the PC, but in the future these titles will no doubt become more commonplace on our machine. This is not the type of product we gamers want and personally I think we should take a stand, now.

We'd like a game that looks and feels as though it should be on the big screen, but what we don't want is some dodgy, hastily-acquired film license to be made into an even worse piece of software. What we want is something like Skeleton Krew, Core Design's brand new, fast and frenetic shoot-'em-up.

Why are we all required to own a copy of this game? If Skeleton Krew was transformed into a multi-million pound movie, perhaps directed by David Lynch or James Cameron, it would be, quite simply, a feast for the eyes and it would probably break several records at the box office. Before this (fantasy?) film can begin to get underway (OK, so it might not and will probably never happen, but use your imagination!), Core's game must make it through the System review grinder unscathed. Not an easy task!

GRAPHICS

I've already made comparisons between Skeleton Krew and the big screen and it's all thanks to the game's wonderfully chunky and highly stylistic graphics. The characters and backdrops have been drawn so that they reflect the dark, moody and futuristic atmosphere of the product.

As you might have guessed from the screenshots, Skeleton Krew is a 3D isometric eight-way scrolling shoot-'em-up, but this could have caused untold problems for the

Skeleton

STORYLINE

The year is 2062. When Deadly Enforcement Aggressive Destruction Incorporated (DEAD Inc.), owned by kryogenics scientist, Moribund Kadaver, takes over a monolithic kryogenics plant on the outskirts of Monstro City, strange goings on start to get even stranger.

Kryogenic mutations, known as Psykogenix, appear on the streets, forcing the populace from their homes until the entire city is overrun by the DEAD Inc. monstrosities. News of this outrage reaches the headquarters of MAD (Military Assertainment Department) and special operatives are dispatched to Monstro City. Only one returns and the survivor, in his dying breath, speaks of a terrible Psyko Machine being created in Moribund Kadaver's mobile laboratory – Dead 1.

In desperation, MAD call upon the services of a team of morbid mercenaries known as the Skeleton Krew.

82%

SOUND

For what seems like years now, I've been whinging about the current state of computer game music and just how bad it is the majority of the time. The company which has impressed me the most over the last couple of years is Core Design. Their sound department seems to get better and better and for Skeleton Krew, the boys have made an important step forward.

Instead of your bog-standard computer music, they've lovingly embraced the thumping beats that go together to make a hip-hop/rap track. Skeleton Krew opens with some atmospherics, a quick voice sample and then the loudest, meanest, biggest, baddest drum loop thumps in and threatens to destroy your sound speakers. Listen to the tune enough times and it's quite easy to imagine someone like Cypress Hill rapping over the top of it!

This is my first musical highlight of 1995 and it's all thanks to Core Design who have obviously got the intelligence to use someone who is skilled at creating original pieces of high-quality music that belong in the '90s and not the '80s.

Other musical moments worth a mention are the huge pounding set of drums which play in between levels, and to get the best out of them they must be turned up as loud as possible. The actual in-game music is slight, but luckily atmospheric enough to keep you happy. The sound effects are also very impressive and compliment the hot shoot-'em-up action perfectly.

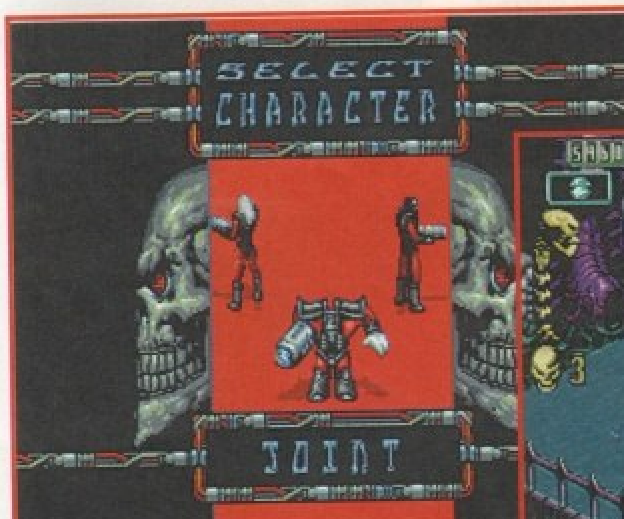
90%



Joint wanders around one of the flooded rooms. Behind there are a pair of mysterious eyes. What happens if we get a bit closer?



Crikey! Now I didn't expect that to happen, although perhaps I should've know better than to trust a pair of mysterious eyes



The first level completed and Joint makes his way down the lift shaft. On the way he bumps into some rather nasty aliens who can be disposed of with a few well-timed shots

The character selection screen where you can choose between Joint, Rib and Spine. Each one has their own distinct advantages, but the choice is yours



developers as almost every angle has had to be catered for.



The three main characters (Rib, Joint and Spine) have their own attributes and are capable of turning a whole 360 degrees. At the end of the day, I don't suppose it matters which one of the 'krew' you choose, but at least you can make that choice.

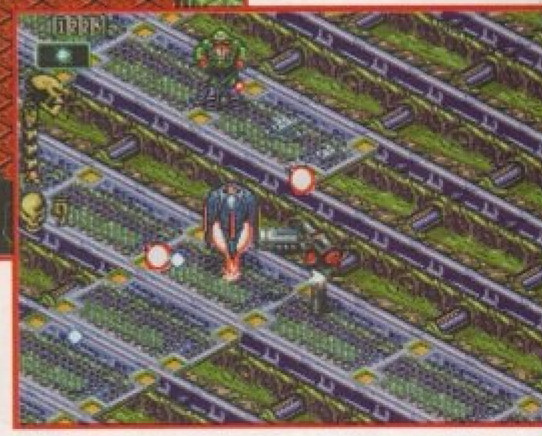
The animations are quite good, especially when some of your enemies die, and it's more than likely that you'll be impressed by the huge end-of-level guardian. The levels vary quite a bit and there are enormous colour changes as you progress into the later stages of the game. The graphics are very impressive and it's obvious that they've been created by someone with a love for science fiction films and comic books.

Skeleton Krew looks pretty damn good and although I would have liked to have seen enemies that vary a bit more, I can still doff my cap to Core's graphic designers.

80%



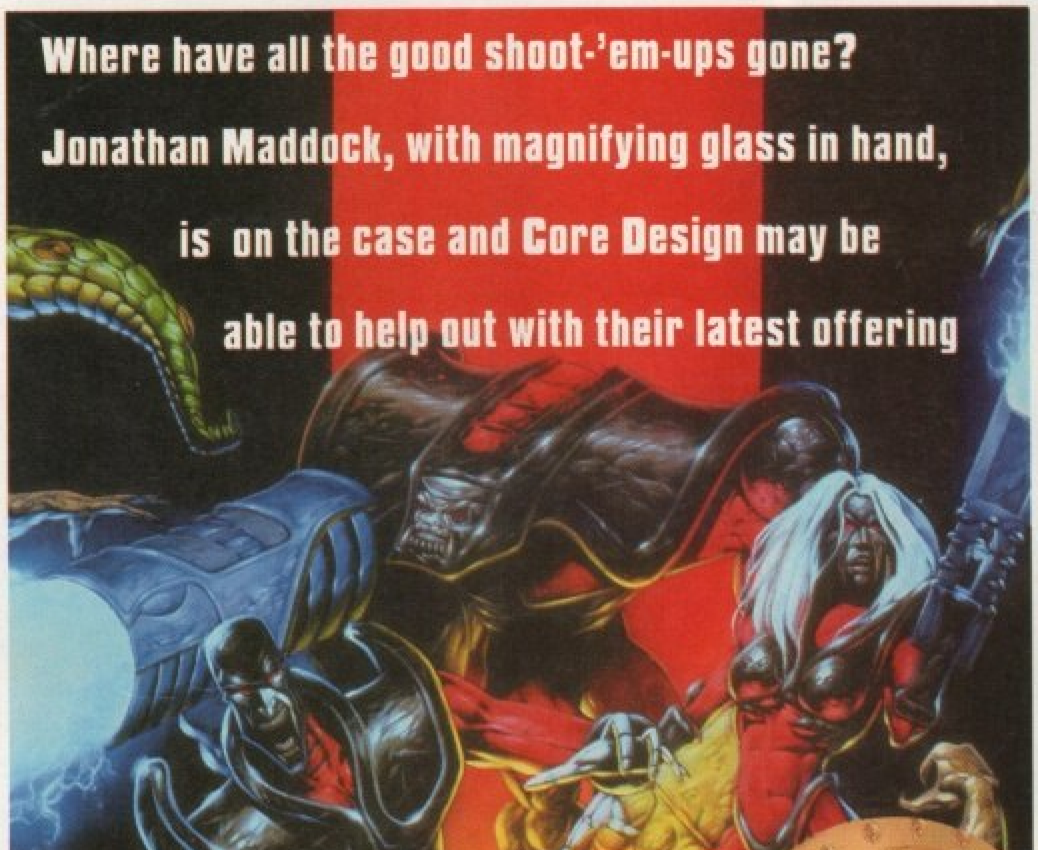
A quick graphics and colour change and one of the Skeleton Krew has made it to the jungle. Watch out though, the place is full of dangerous predators!



The mutant frogs on Venus can be a bit temperamental and cause you a fair amount of damage, but your problems can be solved with a few shots from your blaster

Krew

Where have all the good shoot-'em-ups gone? Jonathan Maddock, with magnifying glass in hand, is on the case and Core Design may be able to help out with their latest offering



- Publisher: Core Design
- Developer: Core Design
- Disks: 3
- Price: £29.99
- Genre: Shoot-'em-up
- Hard disk install: No
- Control system: Joystick/joypad
- Supports: A1200/4000
- Recommended: 68020

ADDITIONAL INFO

A skeleton is the rigid or semi rigid framework that supports an animal's body, protects its internal organs, and provides anchorage points for its muscles. The skeleton may be composed of bone and cartilage (vertebrates), chitin (arthropods), calcium carbonate (molluscs and other invertebrates). It may be internal, forming an endoskeleton, or external, forming an exoskeleton.

The skeleton is constructed from bones. Bone is hard connective tissue. It consists of a network of collagen fibres, impregnated with inorganics, especially calcium phosphate. Enclosed within this solid matrix are bone cells, blood vessels and nerves.

In strength, the toughest bone is comparable with reinforced concrete. Humans have about 206 distinct bones in the skeleton. The interior of long bones consists of a spongy matrix filled with a soft marrow that produces blood cells. Here endeth the science lesson.

OPINION

80%

AMIGA GOLD AWARD

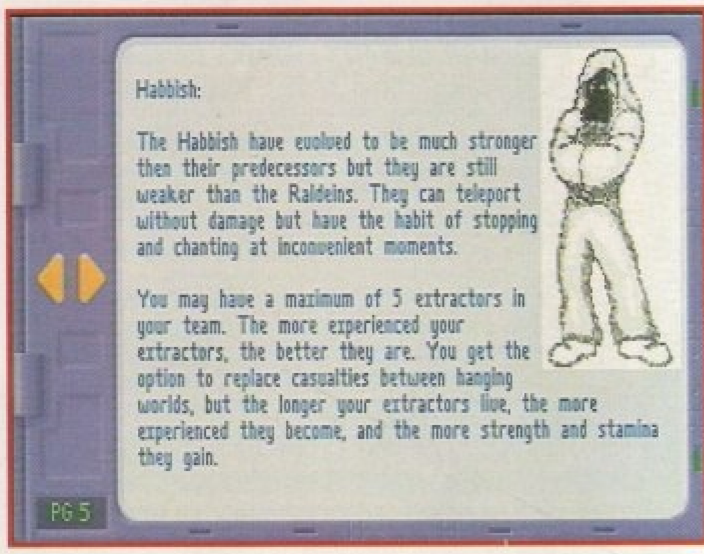
It's been an incredibly long time since I've played a really good shoot-'em-up and although Skeleton Krew didn't manage to completely satisfy my hunger, it certainly left me starving for some more.

I do like the game, but I've got a fondness for shoot-'em-ups anyway, so the casual gamer might want to have a look elsewhere. For people who are interested in stabbing that fire button as fast as possible, Skeleton Krew could well be your cup of tea.

It's got a higher body count than your average Quentin Tarrantino movie and it looks the part in the dark and moody graphics department. Core's blaster has also got the added bonus of a truly excellent soundtrack and in places it can get quite addictive, but it's unfortunately let down by a high boredom factor.

Not all of the six levels has got an end-of-level guardian which is a real shame as the one in the first level is very impressive. The simple fact of the matter is that Skeleton Krew, despite its appearances, just isn't different enough from its competitors to warrant a really high score, although shoot-'em-up fanatics will no doubt love it to bits.

Core's game is certainly tough enough to keep you going for quite some time and because of the sheer quality of the comic book-style graphics and the thumping hip-hop soundtrack, I'm happy enough to increase the percentage, but casual admirers of the genre might feel that there's something missing if and when they eventually play the game.



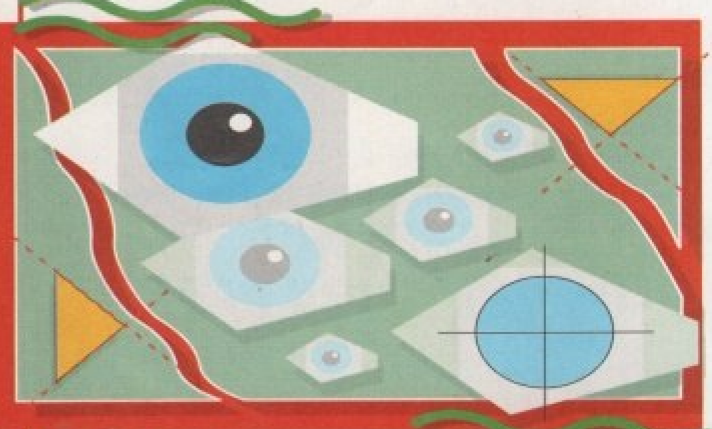
As in the original game, Extractors features the infamous book of Zarg which'll tell you everything you need to know about anything



Millennium have improved the game in several areas, not least in the presentation stakes which has a fancy ray-traced intro

system preview

Extra



One of the biggest games mysteries of all-time. Why did a game as good as Diggers fade away into games heaven? Jonathan Maddock investigates while he takes a peek at the sequel

Excuse me, but can I just ask you gamers out there a question? Was I the only person who liked Diggers? It certainly appeared so considering the percentage scores in the other Amiga magazines.

I thought Diggers was a piece of gaming genius. Toby Simpson, Millennium game designer and programmer had come up with a wonderful and highly original idea that should've sold by the bucket load.

Just because it wasn't a TV/film license, cutesy platformer or a dull mind-numbing shoot-'em-up, people seemed to reject the whole concept. The idea of digging might not sound like the world's best gaming idea, but you only had to spend a few hours tinkering around with Diggers before you became totally addicted.

What people have also forgotten is that Diggers was the world's first CD32-specific title. The hype surrounding Commodore's console was approaching dangerous levels and eventually, expectations and set opinions grew inside gamer's minds and that's where the damage was done.

The comparisons to Lemmings were terribly unjust and after exploding with the might of new CD technology supporting it, Diggers just seemed to fade away. A shame, but it's a situation that can be corrected.

It's a big bold step for Millennium, considering the shenanigans that went on before, but they've decided to release the sequel and hopefully this time, gamesplayers everywhere will give it the benefit of the doubt.

The Cambridge-based software house have ditched the old title and instead of just whacking a huge 2 on the end of their forthcoming attraction, they've given it a whole new name, perhaps the mark of a new Diggers era.

The game is now called Extractors and although it's a title that prompts a couple of obvious gags, it should become a name that will be seen and heard all over the place by the time it's released in early March.

Extractors is set 150 years on from the original game. At this time, a race of creatures perfectly evolved for the job of digging appeared from some far away distant planet. The Zargonian Mineral Trading Authority saw this rich opportunity arise and immediately employed them to extract jewels and fuel from the planet.

The newly employed aliens worked so well that the mines soon became exhausted and it began to cost the ZMTA more money than they had bargained for. There were, luckily, a few more places where the land was rich in jewels and fuel called the Floating Lands.

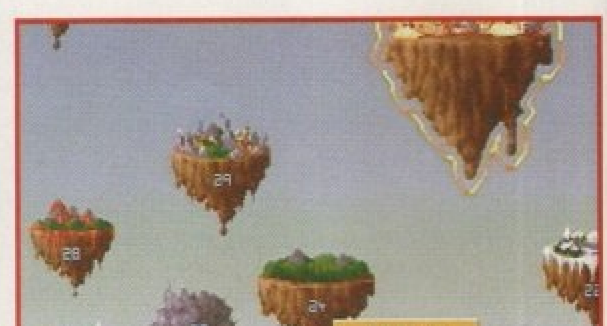
DEFENCES

These huge masses are inhabited by the Flinarj, a peaceful race who built machines to allow their land to float in the sky to avoid being constantly attacked by the Quarriors. ZMTA tried to take the lands by force, but they're protected by an enormous shield.

The shield is powered by 24 generators, all of which have to be destroyed to enable the ZMTA access to the lands. At this moment in time a question of morals comes into play. Does your race leave the Flinarjians alone or do you join the ZMTA for loads of money and take out the shield generators? If you're about to play



The character selection screen. The Habbish have returned, but this time they've got a couple more tribes with them



There are 24 islands to be conquered. The shield generators must be found and then blown up with the dynamite



There is a now a handy practice option so that beginners can get used to the various controls. Experts can also brush up their skills



The shop still plays an important part in the game, but now jewels and fuel are traded automatically

ctors



One of the many worlds to be explored and excavated. Millennium's dig-'em-up is coming your way in March 1995 – don't miss it!

or want to play Extractors, then your answer has to be the latter.

You must travel from floating world to world, finding and destroying the shield generators while, at the same time, successfully mining enough fuel to get to the next land. You won't get very far without any equipment, so, as in Diggers, you'll have to extract the jewels out of the ground for that essential bit of cash.

I suppose if you had to knock Diggers, and quite frankly I don't feel the need to, then you could comment that the levels were a bit too open-ended and thus left you wandering about for ages. Thanks to Extractors and the fact that you've got specific tasks to achieve, the whole game becomes far more focused and more enjoyable to play.

Extractors will appear on the CD32 only because it would be impractical to try and make it work on the lower-end machines, due to the sheer amount of processing that goes into this dig-'em-up. Luckily, A1200 and A4000 owners with a compatible CD-ROM drive will be able to experience the wonderful world of Extractors.

What has Extractors got that Diggers didn't have? Well, for starters, practically everything within the game has been improved or enhanced in some way or another. Extractors uses 256 colours throughout and features six totally different terrain types, each with its own set of animations, colour cycling effects and parallaxed backgrounds.

The game includes 3D-Studio rendered sequences, both in-game and end sections. CD32 owners will need the Full Motion Video cartridge to get the best out of these animations, but having said that, they do look quite good without the need for the add-on.

SOUND EFFECTS

Audio is still just as good, but this time the sound effects are far more extensive and each terrain type has its own CD audio backing track. For those people who accused Diggers of being 'dull', there are now timed bonus levels set on the asteroid levels, which are primed to explode as soon as the player has entered them.

One thing that impressed me about Diggers was just how much time I spent playing the damn thing. One single game could take up to an hour to complete and luckily, Extractors is not too different in that respect. Even for the player that does everything right there are, at least, 60 hours of solid playing time. Thankfully, there is the ability to save your game between levels, allowing you to rest your joypad and your eyes.



The first level and there's the generator underneath. How on earth you get to it, I just don't know. Maybe a map would come in handy

Well, that's about all there is to know and all you need know about Extractors because no doubt you're salivating at the prospect of playing it. I've had my pre-production copy in for a while now and I still yet to tire of it. It looks, sounds and more importantly, plays even better than before.

This is now your last warning. I told you Diggers was good, but for some strange reason you ignored me, so this time I'm going to keep quiet. If you snub the wonderful world of Extractors when it hits the shop shelves in March, that's nobody's loss but your own.

You dig?

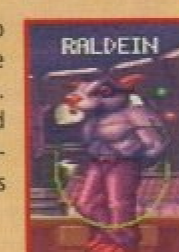
A quick guide to the three tribes of diggers who appear in Millennium's new dig-'em-up. Let's begin. What are your names and where do you come from?



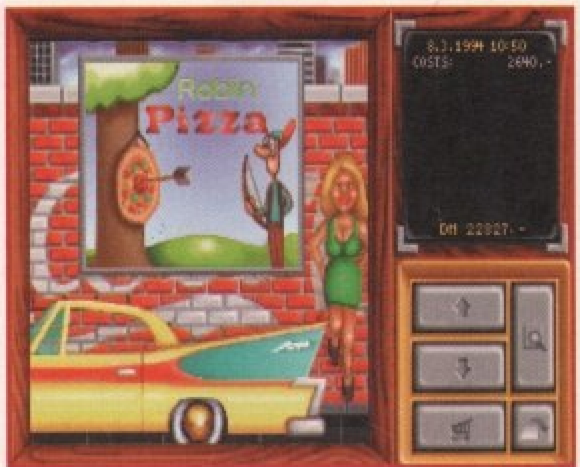
Habbish – Favourites from Diggers. These are strange spiritual characters with little patience. They get bored quickly and are prone to sit-down praying sessions. Performing this act gives them great stamina. The Habbish are also highly intelligent.



Boids – Descended from the ancient F'Targ race who appeared in the first Diggers game, the Boids have exceptional stamina and heal very quickly. They're not very good at digging fast though.



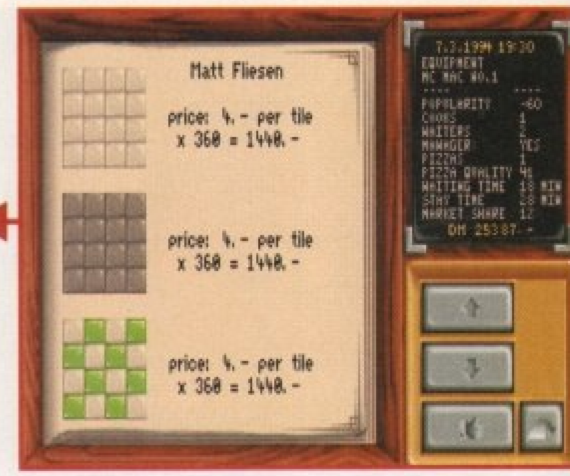
Raldein – These creatures, who look very similar to badgers, are the ultimate mining machines. They can dig like the clappers and are very strong. The only disadvantage that the Raldein have is that they tire very quickly.



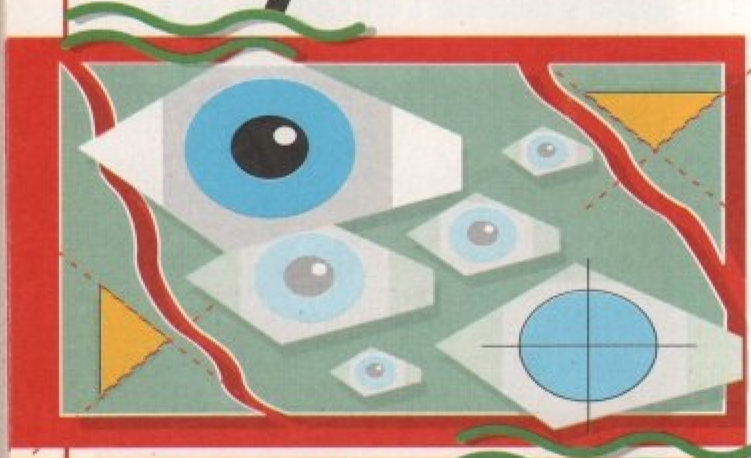
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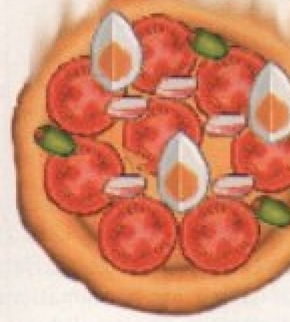
Decor is very important. Create the right look to attract more custom



Think before you splash out. It's no good sending yourself bankrupt



Whether you're a deep pan man or a thin' n' crisp chick, Microprose think they've found a three-topping special to suit everyone's taste. Tina Hackett samples the wares



Pizza

Strategy games. Just what is their appeal? I mean the basis for them usually involves taking on a job that you wouldn't normally do, from playing mayor of a city to a railroad entrepreneur. But the software houses seem to be able to take what is usually a mundane task and turn it into a whole host of possibilities for an interesting game.

Microprose, the strategy-meisters themselves, have really taken the biscuit this time, well rather the pizza base, with their latest offering that puts you in the role of a budding pizza restaurateur. Whatever next, Sim Milkman? Sim Window Cleaner? Well, it seems the scope is endless.

So now there is Pizza Tycoon. It's true, honest! And it is exactly what it says – you can try your hand at being a pizza tycoon. Microprose and Software 2000 have gone and turned the norms of sim games completely on its head, given it a new tongue-in-cheek style and added a completely fresh approach to what is sometimes perceived as being a dull genre.

To win you don't play by the rules! It's not going to be the easy, relaxing game it sounds! The world of making it big in the pizza trade isn't what it used to be and needs someone who doesn't get going when the going gets tough. And if you can't stand the heat, you get out of the kitchen, quite literally! Pizza Tycoon is going to test your entrepreneurial skills to the limit.

The premise is straight forward enough – if you want to play it the 'proper' way. Firstly, you have to choose your character and then you are whisked off to the opening of your first restaurant in one of the many cities you have chosen – Paris, Athens, London, Rome, Moscow, Zurich, Vienna, Stockholm or Berlin. Decide on one of the many locations and then it's down to some serious business.

Apart from the obvious making of the pizzas, you have to furnish your restaurant – it's no good making your caviar and lobster pizzas if your restaurant looks like Grubby Graham's transport caf'. Choice of decor is tied into how much money you have available, so you'll have to take this in to consideration before rushing out and spending tonnes of cash on a designer carpet – especially if your finances are in a mess.

Talking of finances, you can raise dough (sorry) from banks. On the other hand, a bit of corruption wouldn't go a miss at this point because you can always resort to the Mafia! There's many an underhand task available for those that are willing, or just those in dire financial straits. Don't get on the wrong side of the mob though, especially by not repaying loans, else you could find yourself back on the streets.

The choice of your staff is also an important factor in your restaurant. You can hire and fire employees at your discretion. The personnel screens provide you with all the information you need including their salaries, intelligence, motivation and that kind of



Personnel screens give you all the vital info about your staff



All aspects of restaurant business are down to you – and we thought pizza tycoons had it easy!



There are many ingredients available to make tasty pizzas



Think about the kind of pizzas your customers will want to stay ahead of the competition



Look at the street maps for potential locations – keep an eye on your rivals too

thing. So if a high salary isn't justified by the amount of pizzas they do in a day, simply lower their salary, or, of course, if you want to be ruthless then hand out those P45s.

CAMPAIGNING

Advertising is also in your hands. Your choice of adverts will also be determined by cash, although it may be worth risking a lavish campaign to get more customers and in turn, more money! A poster campaign will obviously be cheaper but a more expensive TV campaign will reach more potential customers. The many screens show which ads are available and from the comfort of your armchair, choose which ever takes your fancy.

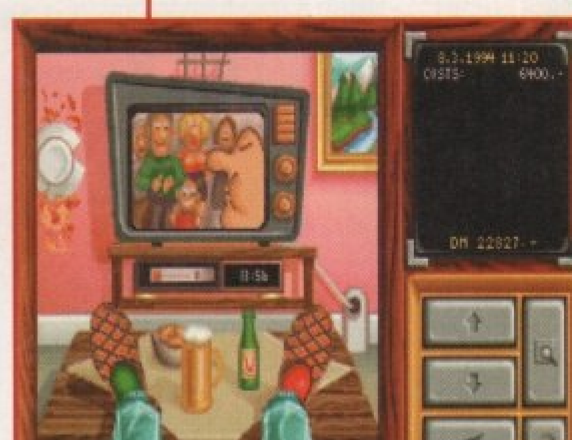
At the core of your mini empire are the all-important pizzas themselves. Successful pizza recipes are essential. I mean, whose gonna want an anchovy/banana/chocolate pizza? So you'll need to think about the kind of pizzas the customers will enjoy. Quality ingredients will help and depending on the supplier you use, the quality of the products will differ. The game does mark your pizzas quite closely. There's a recipe book provided, so if you get your culinary masterpieces close to theirs you'll be rewarded accordingly.

For the prosperous entrepreneur, there's a move into the big time. The overall aim is to become market leader and eventually have world domination in the pizza stakes. Competition is fierce and it's going to be one tough cookie to crack.

With what we've seen so far, things are already looking pretty impressive. It's a new and original concept and I can't wait to see the final version. Pizza Tycoon will be coming to an A500 near you very soon and will be priced at £29.99.


Choose from the many cities around Europe with the ultimate aim of becoming the market leader

Tycoon



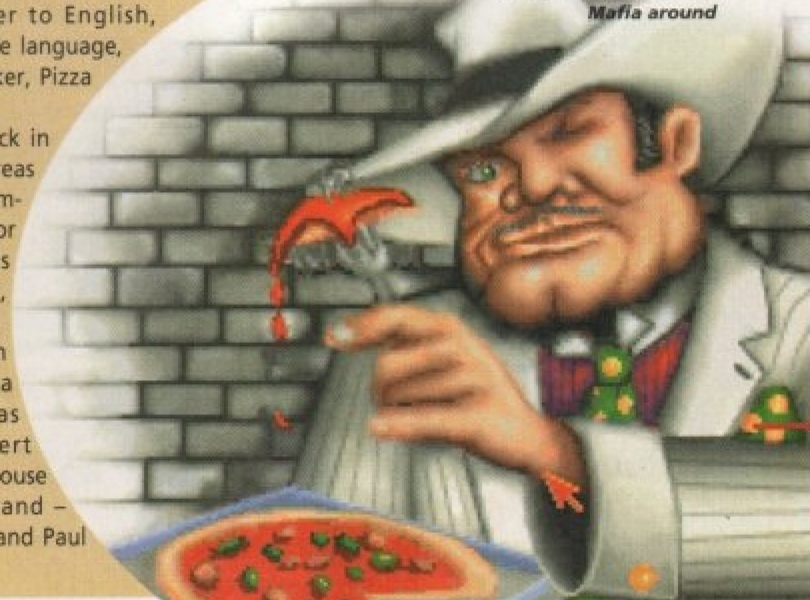
Advertising is important. Choose the TV campaigns you want

Software 2000

Pizza Tycoon was developed by a German company, Software 2000. It was originally called Pizza Connection until the Microprose team converted it over to English, changed some of the graphics (and the language, of course!) and gave it the new moniker, Pizza Tycoon.

Software 2000 was started way back in 1987 by two brothers, Marc and Andreas Wardenga, and has grown into a company of 25 in-house, plus another 50 or more freelancers. Their successes include: Bundesliga Manager 1, 2 + 3, Death or Glory and Cristoph Kolumbus.

The Software 2000 Pizza Tycoon team include Stefan Kurth – Amiga Programmer and Producer, Thomas Langhanki –Producer, and Robert Bielenstien – Sound. Microproses' in-house talents on the project are Steve Hand – Producer, Terry Greer, Eddie Garnier, and Paul Truss – Graphics.


The underworld of the pizza business – things can get nasty with the Mafia around



Make your pizzas carefully to earn top marks!

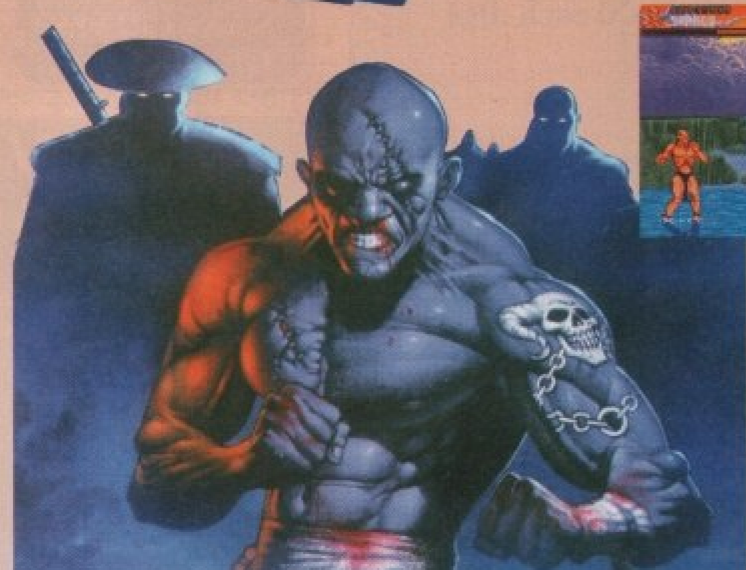
CD32 competition

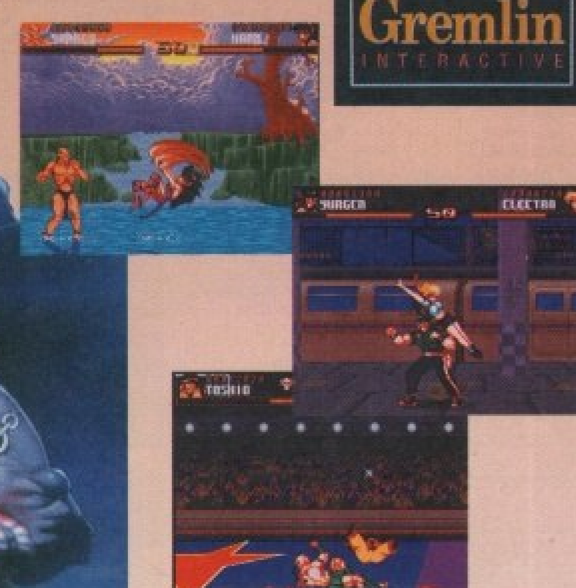


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Fill in the form and send it with your picture to:

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Amiga Computing, IDG Media
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Macclesfield SK10 4NP

Design a Shadow Fighter competition form

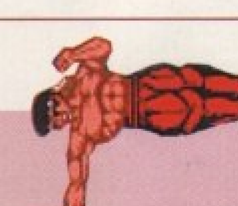
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Address: ______________________

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If you're skilful enough to win a copy of Shadow Fighter, which format would you like to receive (please tick box):

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- A1200/4000
- CD32



The closing date for the competition is: 16th March 1995 and the Editor's decision is final.

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AMIGA GUIDE

Leading the way in Amiga advice, the definitive guide is back to keep enthusiasts fully informed

Here's one

In true Blue Peter style, Frank Nord shows what you can do with a bit of format and a touch of style

This month's assault on the deep, dark mysterious world of the Amiga is going to concentrate mainly on bootable disks – namely, how to make one of your own. This process is somewhat complicated by what version of the Operating System you own, and what your target market is going to be for the disk.

Users of Workbench 1.3 (what still?!) won't be able to use disks that have been formatted using the Fast File System (FFS) or Directory Caching File System (DCFS) which are available with Release 2 and 3 of Workbench respectively. Nor will an Amiga equipped with version 1.3 be able to use most C: directory commands from later versions of Workbench.

So, unfortunately, unless you deliberately want to exclude Workbench 1.3 users from using your disk, either for matters of taste and common sense, or for software reasons, i.e. you've created a new tool that relies exclusively on the use of Appwindows – "Appwindows? What are Appwindows?", say the last of the 1.3 users – you will need to format your disk as OFS (losing about 42K in the process), and make sure you only include Release 1.3 libraries, C commands, devices, etc.

COMMANDS

Unless there is a really good reason to, I would suggest you make use of FFS and Release 2 commands on your disk to give Workbench 1.3 users yet another reason to upgrade their machines. After all, 42K is going to be about a picture's worth, or another sample. It might even mean the difference between putting your program or animation on floppy or not.

Notwithstanding these considerations, there are two methods to making a bootable floppy. There is the subtraction method, which relies on you knowing what you can and can't delete from an already existing bootable floppy, and the addition method, for which you will need to know what files to add to an empty, formatted disk in order for it to work.

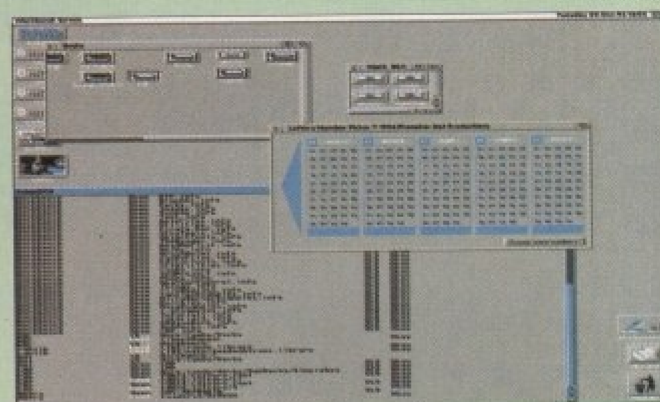
The former method works better for disks that are going to need full Workbench compatibility and only a small amount of space for whatever it is you are going to put on it. The addition method works best if you want to put lots of your own stuff onto a bootable disk and don't necessarily need Workbench, for example a slide show.

The subtraction method

Here's the recipe. First take a standard bootable disk – the best example for this would be Workbench – and make a copy of it. Rename the disk to whatever it is you wish to call it and make sure this disk is in your boot drive (df0:).

Next, reboot your machine to check that everything is working. If you are getting a Workbench as expected we can proceed onto the next step. However, first we need to ask ourselves a question: "How much room do I need to free up to fit my stuff onto this disk?"

If the answer to this question is over 800K you are going to need to rethink your strategy. But let's assume you are only going to need a couple of hundred kilobytes of space – check the boxout on these pages to see how much space you can reclaim on various versions of Workbench to see if this amount is enough. Copy your stuff onto the disk and reboot. Try to load your program. If it doesn't load, check that you have copied any libraries or fonts necessary. If you have and it still doesn't work, load up SnoopDOS and try to load your program again.



SnoopDOS gives you all the info you need to get your program up and running

If you haven't got SnoopDOS, get it. It is an invaluable tool for anyone using an Amiga as anything other than a games machine. It's also shareware, so you can get it for practically nothing.

Making space

The following is a list of files you can delete from the various workbench versions to give space on your bootable floppy for your programs.

Workbench 1.2/1.3

In the C: directory you can get rid of various files which won't get used much, or if you want to go the whole hog you can just leave the files in the second list.

Deleting some: ChangeTaskPri, DiskChange, DiskDoctor, Ed Edit, Lock Search – that will free up about 54K. If you want just the absolutely necessary files in your C: directory, the following are the ones you should leave: AddBuffers, Assign, BindDrivers, Break, CD, Copy, Echo, EndCLI, Execute, FF, List LoadWB, MakeDir, Mount Path, Resident, Run, Setpatch and Wait – this should free up about 138K. You could free up even more if you wanted to mess with the Startup-Sequence and StartupII files.

You can delete the fonts in the fonts drawer, leaving only Topaz, which gives you about 3.5K back, and delete the Translator.library, Speak-Handler and Narrator.device in Libs:, L: and Devs: respectively if your application isn't going to need speech. This will gain you about 37K.

If you don't want people to change the way you have set up Prefs on this boot disk, you can delete the whole Prefs drawer which will save you roughly 60K. Beware though, as this means that they won't be able to change the printer driver or serial port settings.

If you're really desperate for a bit of space, you can get rid of the CLI-Startup, DPAT, PCD, Shell-Startup, SPAT and Startup-sequence.HD files in your S: directory for a massive saving of nearly 4K.

In the system drawer, if you really wanted, you could get rid of everything except SetMap, but this would mean that your user wouldn't be able to format or copy a disk – or open a CLI window. It would, however, save you up to 43K depending on which bits you actually got rid of.

Finally, you can dump the entire Utilities drawer, with the possible exception of More, for a saving of a further 120K.

Workbench 2.04/2.05

C: Directory savings can be made as follows: Avail, ChangeTaskPri, CPU, DiskChange, DiskDoctor, Ed Edit, Lock, MakeLink, Protect, Search and Type, for a saving of 59K.

The bare knuckle C: directory should look like this: AddBuffers, Assign, BindDrivers, ConClip, Copy, Delete, Execute, IPrefs, Join, LoadWB, MakeDir, Mount, SetPatch, and Version – this will save around 88K. Again, more could be saved if you were willing to edit the Startup-sequence.

In Devs: all the keymaps but the one from your country can be happily deleted, returning about 17K to you.

If you don't want to provide ARexx support for your slide show you can delete the following: In Libs: rexxsupport.library and rexxsyslib.library for 36K, the Rexxc directory for 4.5K and RexxMast in the system drawer for 2K, giving a grand total of 52.5K.

You could delete all the programs in the Prefs drawer for a further saving of nearly 160K, but it will mean that no-one will be able to alter your Workbench setup. Try not to delete the drawer inside Prefs called Env-Archive, as it will cause problems with your Startup-sequence.

Once more, you can delete the whole Utilities drawer with the possible exception of the program More for a 50K saving.

I made earlier

The addition method

This method isn't quite as easy to create a bootable Workbench disk, and it takes longer. If you just want a booting disk that isn't going to have anything to do with Workbench though, a slide show or demo disk for instance, then this is the easiest way.

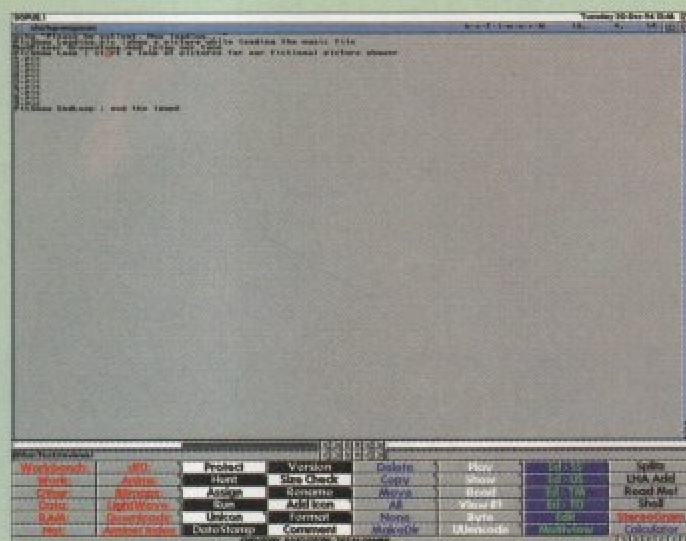
Remembering what I said earlier about the different revisions of Workbench, format your disk. Formatting as Fast File System will give you about 42K extra, but will stop Workbench 1.3 users from using your disk.

Next you will have to create a bootblock for the disk to enable it to autoboot. This is done by opening a Shell window and typing Install Drive df0: Be Careful though! If you only have one floppy drive, make sure your workbench disk is write-protected so that you don't install that by mistake.

Once you have successfully installed your bootdisk you can start bunging files onto it. If you are using Workbench 1.3 it is a good idea to put an L: directory on the disk containing the Disk-Validator program. This will stop your disk getting read-write errors on it while it is being worked on.

If you feel sure that no-one is going to need to write enable your disk once you have finished with it, you can take Disk-Validator off again, but on the whole it would be safer to leave it on there.

Once you have put all your files onto the disk you need some way of loading them. For this you will need a startup-sequence. Create an S: directory on your boot disk and make a new text file called startup-sequence. Edit the text file so it contains instructions to run your program, show your pictures or play your music.



Here we see the happy user editing the startup-sequence for his slideshow

There are so many variations I couldn't possibly detail a startup-sequence for you, but as an example here is a startup-sequence to show some pictures and to play music. All the commands are fictional but relate to real commands in context. Also, anything following a semicolon (;) is a comment.

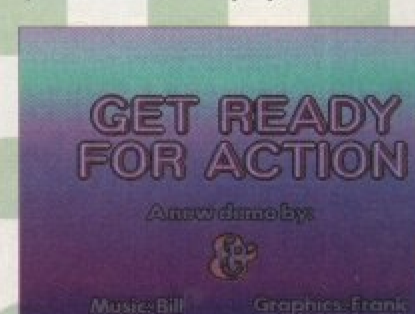
```
PicShow Loading.pic ; show a picture
while loading the music file
ModPlayer Groovytune.mod ; play our tune
PicShow Loop ; start a loop of pictures
for our fictional picture shower   1.pic
2.pic      3.pic       4.pic       5.pic
6.pic      7.pic       8.pic       9.pic
PicShow EndLoop ; end the loop
```

So this startup-sequence will show a picture while it is loading the music we want to play, and then while it is playing the music it will show a continuous loop of nine pictures ad nauseam. Not an inspired demo disk, but an easy to understand one.

If you wanted to add other stuff, you could put the Echo command into a C: directory on the disk and add a line to the start of the startup-sequence. For example:

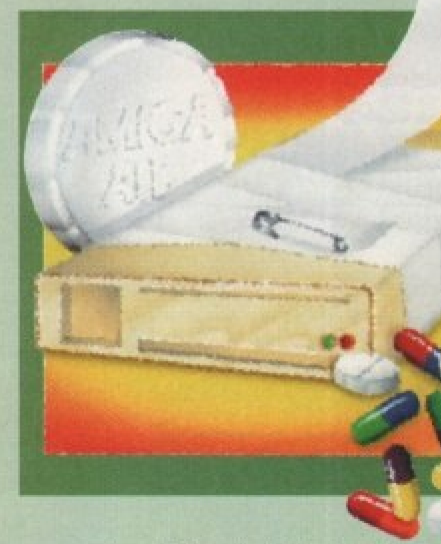
```
echo "Please be patient. Now loading..."
```

which will bring up a friendly message to your users. You could also use the echo command to create a menu of sorts, giving choices as to which file to show. The possibilities are, as they say, endless.



That dynamic duo Frank & Bill spring into action yet again with one more slideshow

Amiga Medical Part 3



Workbench 2.1

C: directory first, just to make a change. Here's the files you can delete with impunity: Avail, ChangeTaskPri, CPU, DiskChange, Ed, Edit, Lock, MagTape, MakeLink, Protect, Search and Type – 52K saved.

Chunkier savings coming up. Remember, these are the only files that should stay in your C: directory, not the ones you should delete: AddBuffers, Assign, BindDrivers, ConClip, Copy, Delete, Execute, IPrefs, List, LoadWB, MakeDir, Mount, SetPatch, and Version. This restores about 79K to your floppy disk.

In Devs: we can get rid of postscript_init.ps for a 5K bonus and in L: we can dump CossDOSFileSystem and the FileSystem_Trans drawer for a further 26K. In Libs: we can ditch the Rexx libraries if we don't need them, along with the Rexxc directory and RexxMast in the system drawer for a gain of 41K. The Prefs drawer in 2.1 is empty, so no savings can be made there, apart from the odd half a kilobyte gained by dumping an icon or two. As with other Workbench versions you can ditch all the scripts in the S: directory, apart from the Startup-sequence, if you need to get that 2K back, and you are welcome to get rid of the Clock and Display programs from Utilities for a final 39K.

Workbench 3.0

The savings in the C: directory just keep coming. Although for the most part Commodore keep rewriting the commands to make them smaller and neater, they just keep on coming up with new ones that we can delete: Avail, ChangeTaskPri, CPU, DiskChange, Ed, Edit, Lock, MagTape, MakeLink, Protect, RequesteChoice, RequestFile, Search and Type – another 55K saved.

But for real savings (about 87K), just leave these commands in your C: directory: AddBuffers, Assign, BindDrivers, ConClip, Copy, Delete, Execute, IPrefs, List, LoadWB, MakeDir, Mount, SetPatch and Version.

Now, Workbench version 3 and up get a bit tricky in terms of what you want to delete. If you go into the Classes/Datatypes directory you will find a bunch of saving just waiting to be made. You could delete them all for a grand total of 90K saved, but I wouldn't delete the files in Classes/Gadgets because they are used by the system for Prefs, among other things.

If you have deleted the datatypes in Classes/Datatypes, you can also delete the datatypes in Devs:datatypes because they will serve no function. These don't add up to a big saving though, only about 2K.

While we're in Devs: you can get rid of the Postscript_init.ps file as well for an extra 5K.

Going on to L:, deleting CrossDOSFileSystem and the FileSystem_Trans drawer will give you back 26K. Following the details given in Workbench 2 and 2.1 will get rid of the ARexx capabilties of your Amiga for 41K, and dumping all textfiles in S: apart from the Startup-Sequence will add 2K to the total. Finally, getting rid of the Clock and Multiview programs from your utilities drawer will give you 36K back.

Workbench 3.1

This is pretty much the same as Workbench 3.0 but you can also delete the nonvolatile.library and realtime.library from libs: to get about 7K back.

Multiview is even bigger now, so deleting that and the clock will give back 44K, rather than 41K, and in C: there is a file called LoadResource that can happily be dumped for an additional 4K.

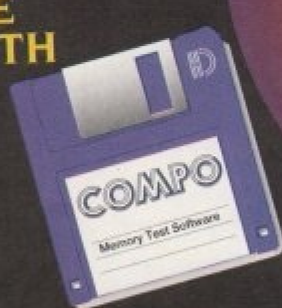
These aren't all the savings that can be made, but they are a good starting point and should be pretty safe. If you are in need of further room, try editing the Startup-sequence to get rid of commands like Conclip which takes up a lot of space (relatively), or dumping further libraries like the maths ones.

When you delete stuff, keep rebooting your machine to check that it still works so that you don't end up getting rid stuff and not being able to work out which was the vital file you deleted.

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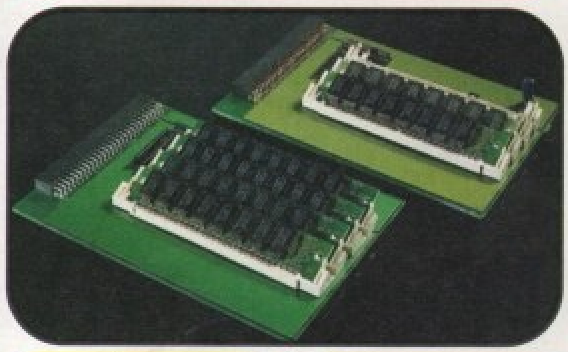
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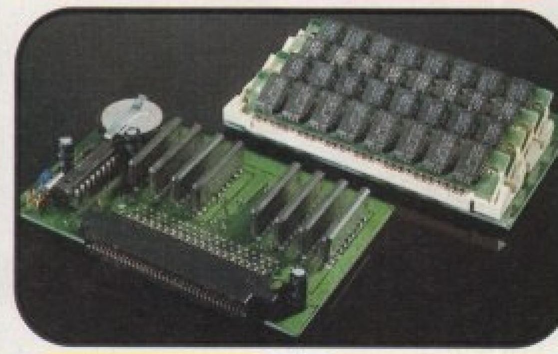
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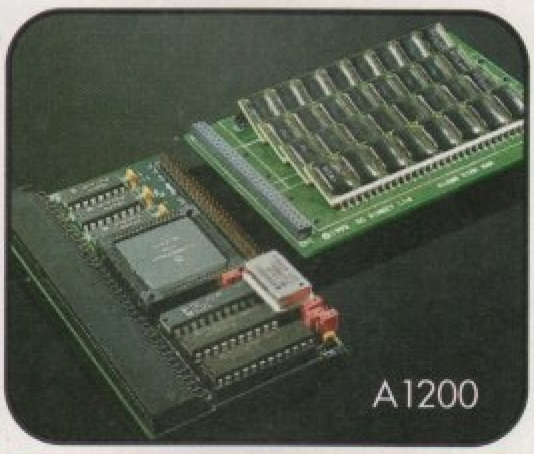
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Before spotlighting the big names in Amiga 3D on a individual basis, it's well worth running over a few basic rules of thumb which invariably save massive amounts of time and frustration for any 3D enthusiast.

In the

Paul Austin kicks off the latest addition to the Amiga Guide with a breakdown of the essentials of 3D design and animation

Design essentials

Before even putting mouse to mat it's essential that any designer has a firm plan of action, especially if the project is to be animated.

It's all too easy to charge head-long into a design session, only to discover four hours later that your pride and joy is totally unsuitable, or worse still, incapable of performing as required within the anim.

As a consequence, fairly detailed planning of both the objects and the animation as a whole is essential. In general, object design is the first and easiest part of the process. Can the object interact with other elements in the animation as planned? Will the basic design allow for the desired movement and so on?

Secondly, but equally important, is story-boarding. Although roughly sketching out your models is essential, actually putting them in context is all important.

For example, if you're designing an architectural fly-through you could save yourself hours of work by simply knowing in advance what will and won't be seen during the animation.

If you have a story-board at hand you'll know exactly what will be required for each shot, and better still you'll also have an approximation of the angle from which it will be viewed. This immediately offers two huge time-saving advantages over a simple list of elements.

TIME-SAVING

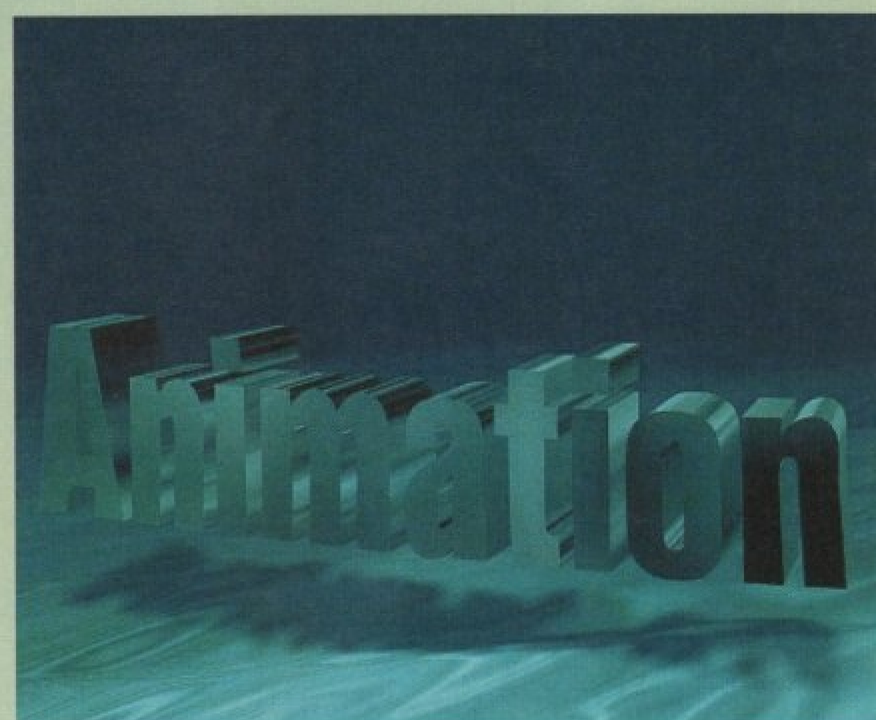
Firstly, there's the reduction in design and rendering time, plus the all-important memory requirements. For example, your rooms will all need doors, which may – on occasion – require fairly extensive design touches such as panelling, bevelling, handles, key holes and so on.

Modelling from a simple list would usually mean one fully-detailed door being copied and pasted around the entire building, when in reality only one or two may require high detail or more importantly be seen from both sides.

Obviously, a detailed storyboard would mean you'd know in advance where unnecessary detail could be eliminated, thereby minimising wastage on all manner of elements within the animation.

Whenever possible, it is always advisable to build to scale. At first this may not seem very important, however after you've been modelling for some time you'll soon develop an extensive library of objects which often become an invaluable resource.

However, if you've already got into the unsavoury habit of designing to no particular scale, I guarantee you'll regret it later.



A scanline image from an eight hundred frame animation, which uses shadow mapping as the default light source. Renders quick and looks good, what more could you ask for?

Motion control

Obviously, motion control of both the camera and objects within a scene is all important, and often causes more heartache than almost any other aspect of animation.

The key – excuse the pun – is to keep things as simple as possible, at least during the initial design stages. The trick to effective motion of both actors and the camera is to use as few key frames as possible.

To start with, just add a key at the first and last frames for the shot you require. For flying logos and so on this is often the first and last frame in the entire anim. However, for more complex production which may require camera cuts, the process does need to be segmented into individual shots. Again your story-board comes into its own.

If you've done your homework you should already know the shots you want and the duration between them. Having said that, I strongly advise making camera motion to last.

Like a real-world studio, rehearsal for the actors is all important. Are the actors where they should be, is the lighting correct, are there any unwanted collisions and so on?

All very easy to spot from a suitable static vantage point, but if the camera is cutting from shot to shot or panning wildly it's almost impossible to direct the action amidst the growing confusion of camera angles and animated objects.

This particular rule of thumb even applies to packages such as Lightwave, which can generate wireframe previews from a number of view points. The reason is that mixing direction with camera work almost always ends up with a compromise of one kind or another. Obviously, the temptation is to pull all the elements together as quickly as possible, but try to keep the traditional theatrical process in mind – it will pay dividends in the long term.

A final tip when it comes to object motion. Wherever possible, don't forget to make full use of the ease-in and ease-out options on your particular package. All modern packages have some form of control over the acceleration of individual actors. This is especially useful for flying logo productions as it often adds that all-important touch of class to the production.

There's nothing that looks more amateurish than logos which slam into place or elements which move at a totally flat speed across the screen. Remember, corporate productions need all the impact and panache they can muster, so it's essential you don't overlook the finishing touches – they often make all the difference.

Camera work

Aside from improving your modelling, another huge advantage of story-boarding is the affect it has upon the structure of your animation. Because you know the shots you want before you begin to animate, story-boarding can often inject some much needed structure into your camera movement.

One of the biggest complaints often levelled at 3D animation is the often outlandish, and often completely unnecessary camera work. Although most real-world cameramen/women would give their right arm for the variety and freedom that 3D can provide, simply flying the camera wildly around the scene can often destroy the impact of the overall anim.

The real key to classic animation often rests on the combination of effective camera work combined with appropriate lighting.

The story-board once again comes into its own. No film maker ever walks on to a set without a script and story-board and if your 3D work is to be as much art as animation, classic cinematic must be embraced and

beginning

Amiga 3D Part 1





A simple figure against a plain white wall. Add a couple of light sources and something to shine through and the image takes on a much more interesting look

On the face of it, the simple answer is to simply scale up or down as the need arises.

Unfortunately, although this may appear easy in theory it can become something of a nightmare in reality. For example, lets assume you're modelling a coffee table which is already at the appropriate scale. Then you remember an ashtray from a previous project that would be an ideal accompaniment. Load it up, and guess what... You're nice little ashtray is in fact 1.576 Km across. Now all you've got to figure out is the reduction percentage needed to get the monster down to 20cm. Of course, you could spend the next quarter of an hour scaling down with the mouse – all in all not an ideal situation.

TRADE RULES

The final golden rule when it comes to modelling reads as follows: "Never, ever model anything from memory." This one should be written in stone. The biggest mistake in the world is to rely on memory alone. No matter how simple an object may be, it's essential you either work from photographs – or better still the real thing.

If you don't I'll guarantee the finished model will either be wrongly proportioned or lacking in some essential detail. And believe me, everyone who sees it will spot the mistake and make a point of telling you just where you went wrong.

then expanded upon.

For example, imagine Hitchcock's classic shower scene if it were shot as a single fly-by camera sequence. Animation must be planned on a shot-by-shot basis.

Remember, you're making movies not just animations. Why not steal some classic film-making techniques, combine these with traditional camera angles and then add the power that only a 3D camera can provide.

Use cuts rather than constant tracking shots or super smooth camera pans. Try not to track the camera to a particular object. There's nothing more computer-esque than the main actor in a scene being slap bang in the middle of the frame.

Experiment with tracking to null objects, use zoom to add emphasis or tension to a shot. If your software supports depth of field, motion blur and other real-world emulations, try to include them. They all add to the realism and intensity of the animation.

Lighting

Lighting is another area which is often overlooked in the race to complete a project. In my opinion the art of lighting often makes the difference between a 3D artist and a 3D enthusiast.

If you talk to any self respecting photographer about the importance of lighting, you'll soon realise just how vital close attention to lighting can be.

The most common mistake made is to over light the subject, the end result being a flat image which lacks both detail and any semblance of subtlety.

It's important that you have a rough lighting setup from the offset. Obviously, texturing objects is important if you're attempting to inject a degree of realism within a screen. As a result, there's no point in designing texture and procedural maps in a whiter than white world if the end result is meant to imitate a gloomy underworld.

Secondly, try to minimise the amount of ambient light. On most ray tracing and modelling systems the default ambient light setting is way too high.

A much better approach is to use a fill light in the scene. This has two main advantages. Firstly it's intensity and position can be controlled, but perhaps most important of all it will cast shadows and soften the shadows of other lights in the scene.

As you're probably well aware, adding additional lights to a scene will slow rendering. However, it's often a sacrifice well worth making and for those running software which supports shadow mapping, the only real overhead will be available RAM as shadow-mapped lights add comparatively little to rendering times.

In addition to adding one or two extra light sources, it's also worth remembering that the lights themselves can be animated and if applied with some thought, this alone can transform a fairly bland study in a moody masterpiece, with the shadows of the actors playing just as big a part in the overall affect as the actors themselves.

Well, that's about it for the inaugural flight of the latest addition to the Amiga Guide. Next month I'll be looking at time saving techniques, tricks of the trade, how to share models between platforms, plus the essential information on aspect ratios.

Europress

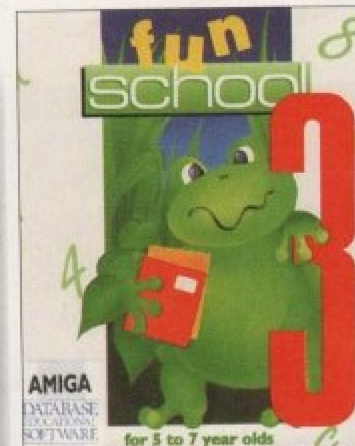
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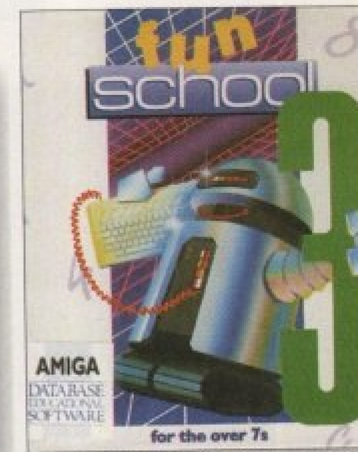
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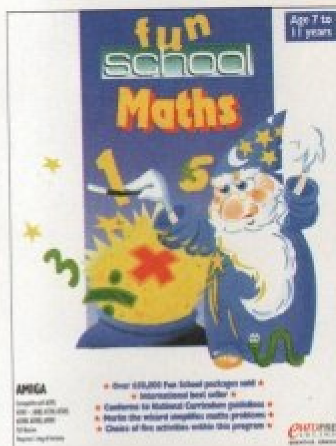
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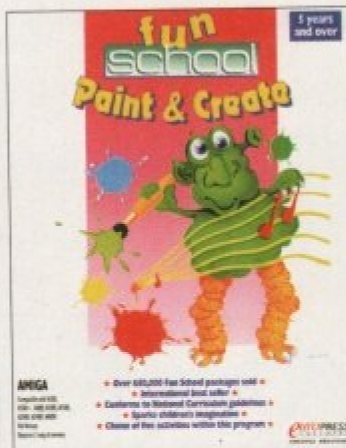
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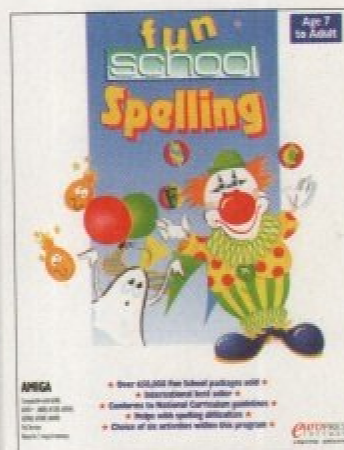
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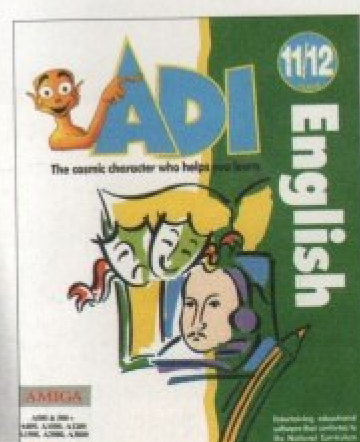
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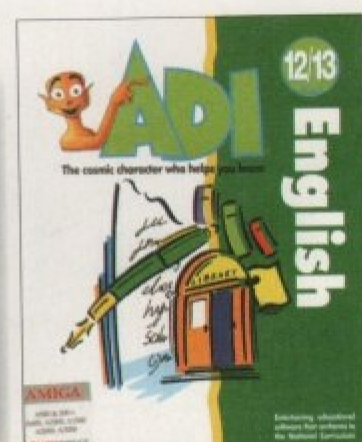
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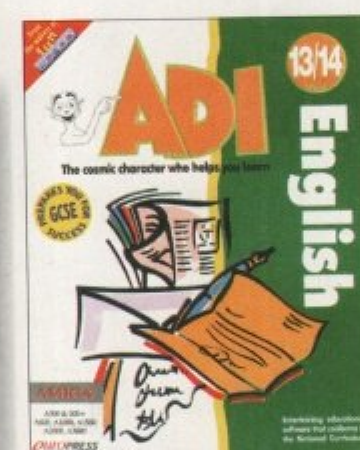
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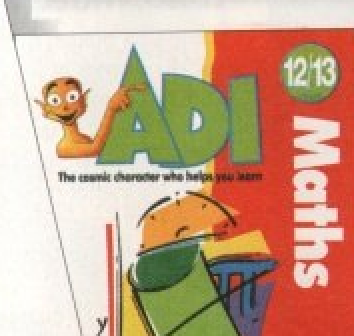
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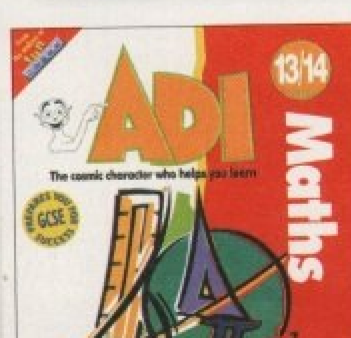
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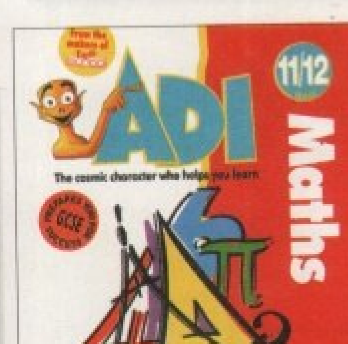
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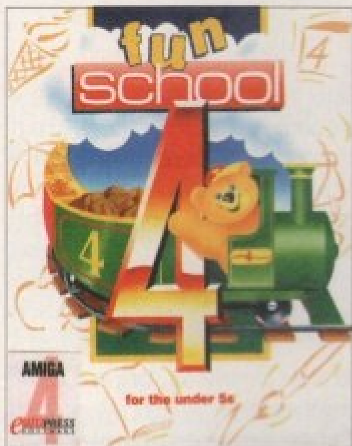


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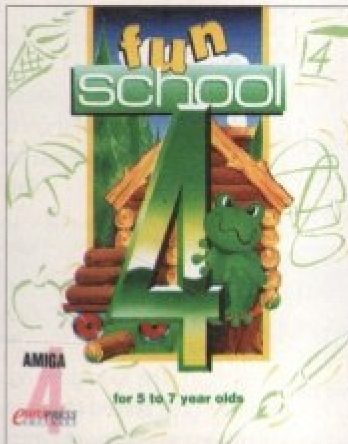


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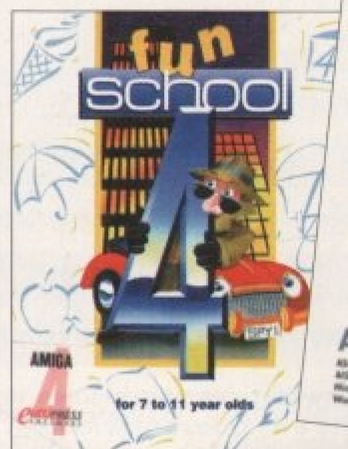
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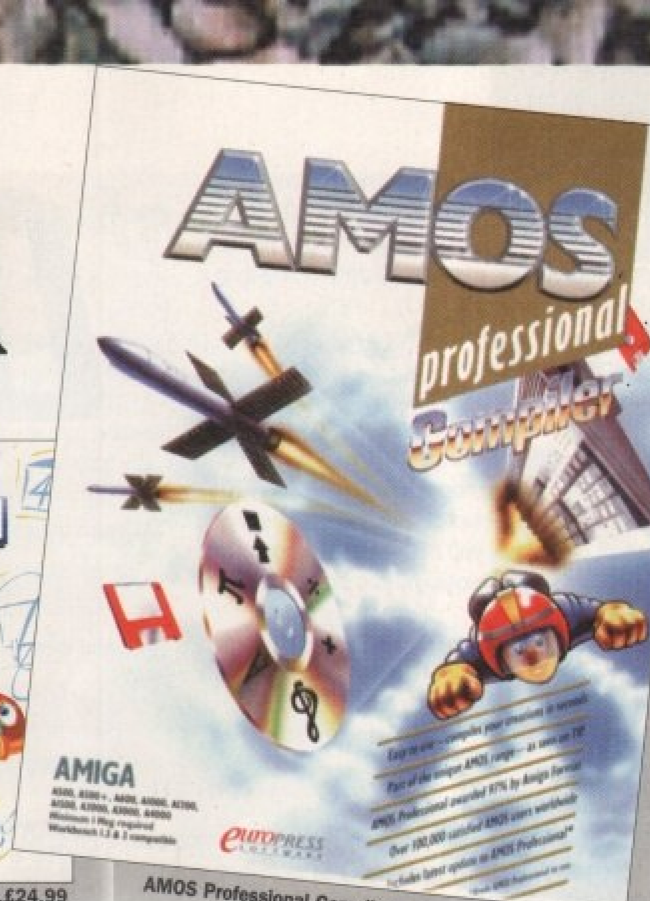
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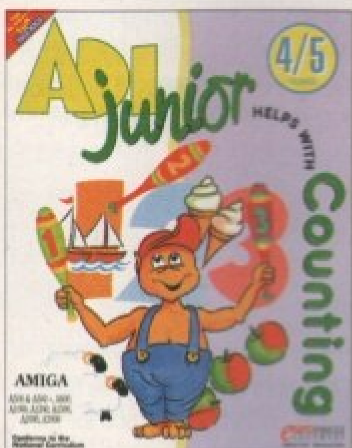
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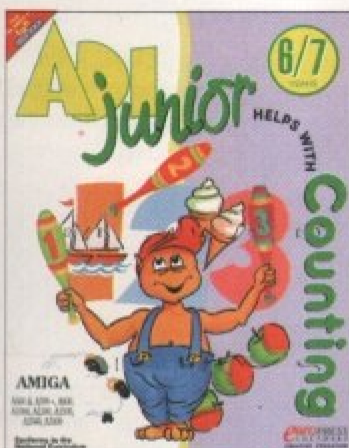
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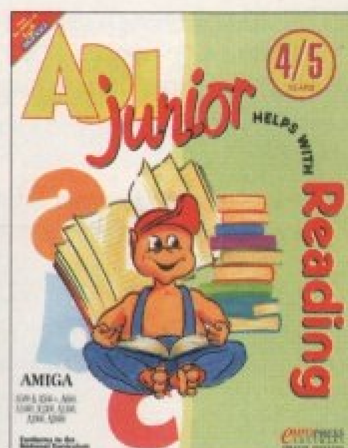
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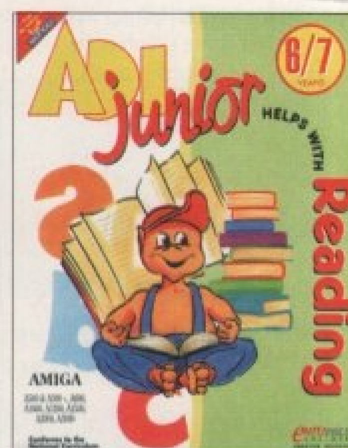
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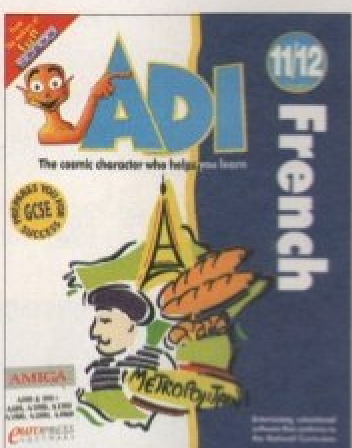
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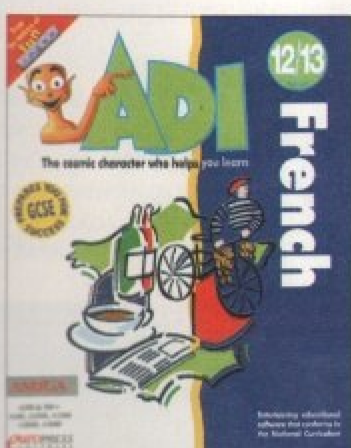
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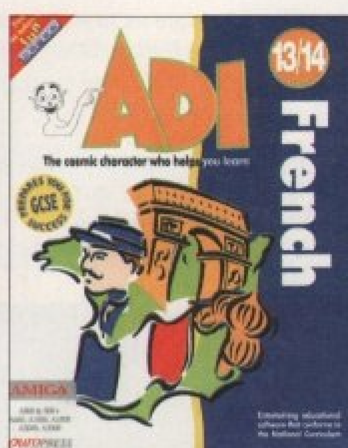
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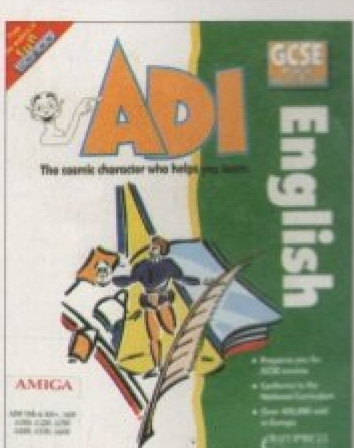
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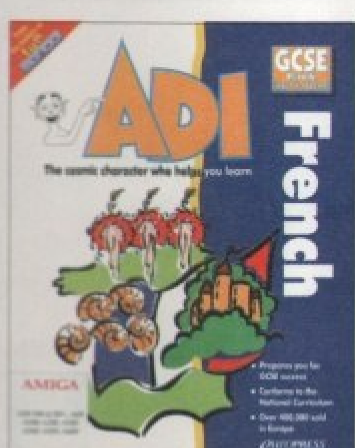
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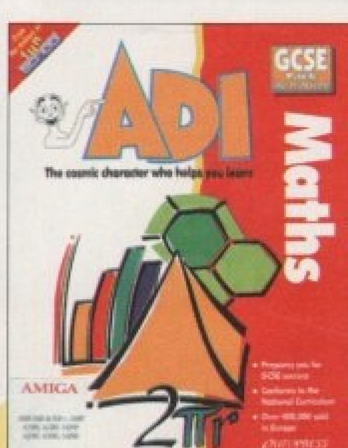
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AMC 3/95

Game on

This month we'll be looking at how to create a whole game program with Easy AMOS. It'll be a simple shoot-'em-up with graphics and sound, and joystick control too. It looks so much harder to code than it is, but that's the beauty of Easy AMOS.

The principles we will learn here are manifold: How to structure a game program without using PROCs, how to read a joystick, how to use collision detection, how to sequence the events in a game to make things flow in the right order, and many other things.

To illustrate how a game program works in Easy AMOS, I've put together this short example. Of course as a game it's not much, but it does show you how a game program goes together, and what sort of things you can put together with minimal code.

The graphics for the game are created by the game code, so you don't have to add any drawn graphics of your own. Of course you can do this later if you like as it's not essential right now. Let's break down the listing and see how it works:

```
Rem *** simple game design ***
Rem *** (c)1994 Phil South ***
Rem
```

This REM statement at the beginning isn't actually acted on, it merely serves to sit there in the listing to be read by coders. It indicates the title of the program and who wrote it.

The first thing we must do is create the game graphics by drawing simple graphics on the screen and grabbing them as bobs:

```
Cls 0
Ink 11 : Bar 5,0 To 35,10 : Circle 5,5,5 : Ink 5 : Paint
4,5 : Ink 0 : Circle 35,5,5 : Paint 31,5 : Get Bob 1,0,0 To
36,11
```

This draws a bar on the screen, then draws a circle at either end of it, and fills the first circle with a light colour and the second with black. This gives you some idea of which direction your ship is pointing.

```
Cls 0
Ink 3 : Circle 5,5,2 : Paint 5,5 : Get Bob 2,0,0 To 11,11
```

This draws a simple ball, and grabs this as the missile.

```
Cls 0
Ink 6 : Bar 1,1 To 11,11 : Ink 14 : Circle 6,6,6 : Circle
6,6,2 : Get Bob 3,0,0 To 13,13
Cls 0
```

These three lines draw the UFO bob, and then grabs that as the alien ship for the attack wave. The final CLS 0 clears the screen ready to play the game. Next we hide the pointer and turn the text cursor off:

```
Hide : Curs Off
```

and then we can dimension the array for the alien ships:

```
Dim _GRIBBLY(6)
```

There are going to be six aliens, so the array is six units wide.

Now we can open the game screen, which will be 320x256 and 16 colours in low resolution:

```
Screen Open 1,320,256,32,Lowres : Double Buffer
```

The DOUBLE BUFFER command smoothes animation by using a virtual screen. The variable _POINTS needs to be reset to zero before we can rack up a score:

```
_POINTS=0
```

This is the end of the basic pre-game set-up.

The new game loop starts at the label _NEW, and this is where that part of the program starts:

```
_NEW:
_LIFE=3 : _BADDIES=6 : _SHIPX=250 : _SHIPY=100 : _BAD-
DIEX=0 : _BADDIEY=40 : _MISSILEFLAG=0 : _SHIPFLAG=0 :
_BADDIEFLAG=0
Curs Off : Cls 0
```

We initialise all the variables for lives, alien ships, the starting co-ordinates for the aliens and our own ship, and then some flags. Flags are set to enable you to detect and hold a feature, like the pressing of a button, so that the event isn't detected over and over too quickly.

Next we display the score and level:

```
Flash 3,"(00f,3)(0f0,3)(f00,3)" : Locate 10,20 : Paper 0 :
Pen 3 : Print "Your Score: ";_POINTS
Locate 10,21 : _LEVEL=_LEVEL+1 : Print "Level";_LEVEL
Wait 100 : Cls 0
```

The screen waits like that for 100 clicks and then clears.

We can then set up the background for the game, which in this case is a random starfield of tiny circles one pixel in diameter:

```
Ink 2
For STARS=1 To 50
        Circle Rnd(320),Rnd(256),1
Next STARS
```

The loop goes around 50 times to make 50 stars, and each is placed randomly around the screen.

Following this we set all the alien sprites to zero:

```
For Z=1 To 6
        _GRIBBLY(Z)=0
Next Z
```

And then we find ourselves at the main REPEAT/UNTIL loop, which checks the joystick and positions our ship on the screen:

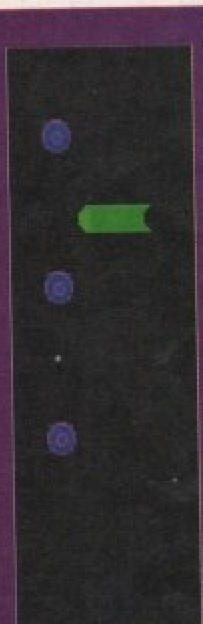
```
Repeat
        If Joy(1)=4 and _SHIPX>30 Then _SHIPX=_SHIPX-2
        If Joy(1)=8 and _SHIPX<320 Then _SHIPX=_SHIPX+2
        If Joy(1)=1 and _SHIPY>0 Then _SHIPY=_SHIPY-2
        If Joy(1)=2 and _SHIPY<249 Then _SHIPY=_SHIPY+2
        Bob 1,_SHIPX,_SHIPY,1
```

As a part of this loop we see that if the ship flag has been set to 1, and if the ship has been hit, then the bob for the ship is turned off.

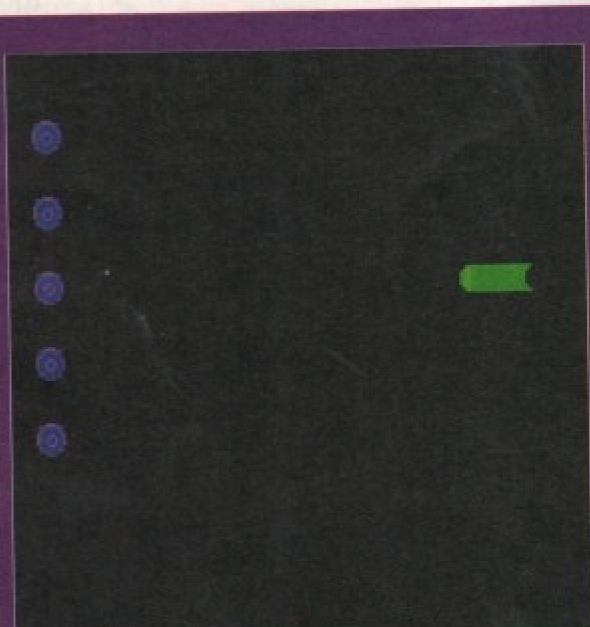
```
        If _SHIPFLAG=1 Then Bob Off 1 : _SHIPX=250 :
_SHIPY=100
        Wait Vbl
```

Next the attack wave is drawn. This attack wave is a very simple row of ships advancing towards the player from left to right, and it's not very taxing, but more complicated attack waves can be made.

You could, for example, write a program which stores joystick movements as a table of figures, and then store



The basic bobs



The startup positions of the ship and the aliens



It's game over, and you have lost



Add a few stars and the illusion of a space game is complete. Well, almost



You shot at an alien, but you just missed

In part three of our series on Easy AMOS, Phil South shows how easy it is to create a game program



them in the program as a read/data statement. In this case we simply copy the movement of the top sprite and do that six times down the screen:

```
        For J=1 To 6
                If _GRIBBLY(J)=1 Then Goto
_JUMP
                Bob J+2,_BADDIEX,_BAD-
DIEY+_GAP,3
                _JUMP:
                _GAP=_GAP+30
                If _GAP>150 Then _GAP=0
        Next J
        _BADDIEX=_BADDIEX+2
```

When the baddies get to the right of the screen, we turn them off and put them back to the left-hand side to come on as the next wave. You only get one crack at each wave as they go by, and if you try to shoot any more than one on each wave, they'll probably crash into you.

Here's where we check the position of the aliens:

```
        If _BADDIEX=320 Then _BADDIEFLAG=0
        If _BADDIEX=320 Then _SHIPFLAG=0
        If _BADDIEX=320 Then _BADDIEX=0
```

Next we check the joystick button to see if it has been pressed. If it has we fire a missile and set the missile flag, and the next time the program comes around it won't fire a missile:

```
        If Joy(1)=16 and _MISSILEFLAG=0 Then
Shoot : _MISSILEFLAG=1 : Bob 2,_SHIPX,_SHIPY,2 :
_MISSILEX=_SHIPX : _MISSILEY=_SHIPY
        If _MISSILEFLAG=1 Then _MISSILEX=_MIS-
SILEX-5 : Bob 2,_MISSILEX,_MISSILEY,2 : If _MIS-
SILEX<_SHIPX-190 Then Bob Off 2 : _MISSILEFLAG=0
```

The missile burns out if it gets more than 190 pixels away from the ship. When the missile burns out, the flag is set back to zero so another missile can be fired.

Next we check to see if there has been a collision, either between the ship and one of the aliens, or the missile and one of the aliens.

```
        If Bob Col(1,3 To 8) and _SHIPFLAG=0
Then Gosub _YOURDEAD
        If Bob Col(2,3 To 8) and _BADDIEFLAG=0
Then Gosub _BADDIEDEAD
```

If a collision has occurred, the subroutine is called to explode the bob and keep score. The joystick checking routine is run until either the amount of lives or the amount of baddies is zero:

```
Until _LIFE=0 or _BADDIES=0
Wait 25 : Boom : Boom : Bell : Wait 150
```

When all the aliens have been shot or all your lives are used up, the boom and bell sound to signal the end of that level. After that, all the bobs are turned off:

```
For Z=1 To 8
      Bob Off Z
Next Z
```

and if the aliens were shot you go to the next level, but if all your lives were exhausted, it's game over:

```
      If _LIFE=0 Then Goto _GAMEOVER
      Goto _NEW
```

Each time a collision is detected you are sent to one of these subroutines:

```
            _YOURDEAD:
            Boom
            _SHIPFLAG=1
            Wait 10
            _LIFE=_LIFE-1
            Return
```

which set a flag and decrement the amount of lives you have. If it's a baddie that has been shot it's a little more complex. The baddie must be erased but still leave a gap in the attack wave. So to reform the attack wave you must find out which bob was hit, and replace that with a gap of sufficient size to keep the formation:

```
      _BADDIEDEAD:
      Boom
      _BADDIEFLAG=1
      Bob Off 2
      D=0
      For A=3 To 8
          If Col(A) Then D=A
      Next A
```

The number from the collision detection is matched to an offset to fit a gap into the formation:

```
      If D=3 Then _MISSING=0
      If D=4 Then _MISSING=30
      If D=5 Then _MISSING=60
      If D=6 Then _MISSING=90
      If D=7 Then _MISSING=120
      If D=8 Then _MISSING=150
      _GRIBBLY(D-2)=1
      Wait 10
      Bob Off D
```

Once the gap has been calculated and the bob turned off, the points you scored can be added to your total, ready for the next round.

```
  _BADDIES=_BADDIES-1 _POINTS=_POINTS+1050
  Return
```

If the game is over you have to bring it to a graceful close. Firstly you have to clear the screen and tell the player he's had his chips:

```
  _GAMEOVER:
  Cls 0
  Locate 10,21 : Print "<<< Game Over >>>"
```

Then you wait for him to push the joystick button:

```
  Do
          If Joy(1)=16 Then End
  Loop
```

The DO/LOOP will go around and only the joystick button or breaking out of the program will stop it.

And there it is, a fully formed, if a little elementary, game program written in Easy AMOS. You can use this program as a basis to create your own games, as the processes used are pretty much the same for any game program that uses a joystick, aliens and missiles.

Adding graphics and sound

The thing that makes Easy AMOS, indeed any flavour of Amos, such a treat to use is that it allows you to embed graphics and sounds into the programs using the memory banks.

The graphics and sounds are created separately and added to the program – so the code you see here does not create the game graphics. These have to be drawn by you using a graphics program, or the built-in bob editor, and added to the program. You do this by loading them into a program bank.

To make things easier I have created some simple bobs for you to add to the game, and these can be found on the cover disk, stored as an "abk" file. To load this file simply go to direct mode and type:

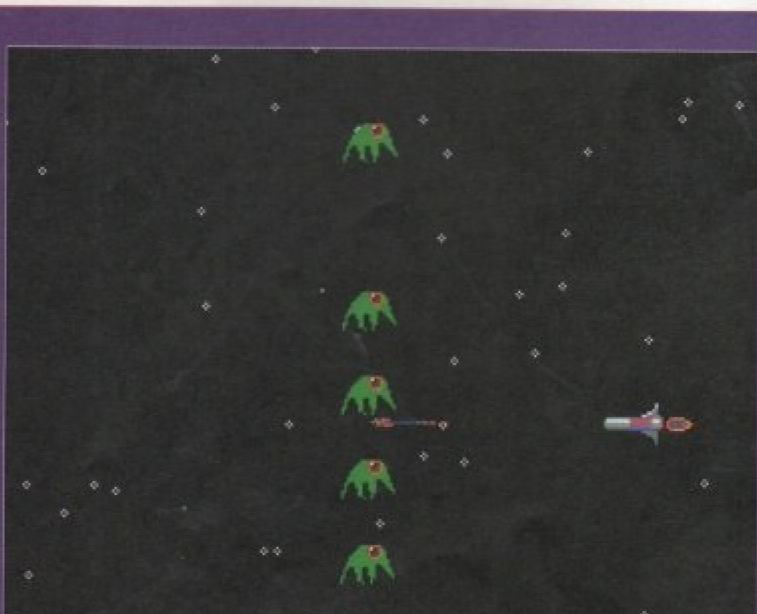
```
load "blastsprites.abk"
```

making sure, of course, that the file is in the current directory. Then all you need to do is add the line:

```
Get Bob Palette
```

after line 13 of the program, and the bobs will be the right colours too.

You can add sound modules using the TRACK LOAD command, and play them with TRACK LOOP ON to loop them and TRACK PLAY to play them. You can even load and play sound samples.



Add a few bobs that have been drawn with the Bob Editor and you start to have something worth playing

Write stuff

If you have an AMOS question, or a routine you'd like to share with the world, then please write to Phil South,

Amos Column, Amiga Computing, Media House, Adlington Park, Macclesfield SK10 4NP.

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MAY



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JUNE



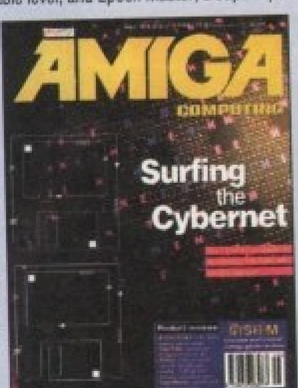
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JULY



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AUGUST



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SEPTEMBER



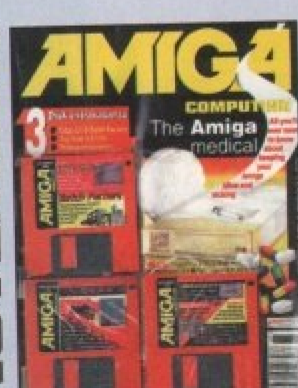
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OCTOBER



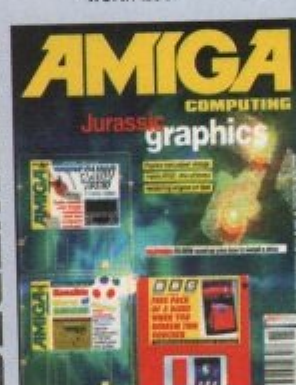
We look at the freelance graphics market to see how you can make a bob or two with your creativity. Plus: Forge, Pyromania, Picasso and Pablo.
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NOVEMBER



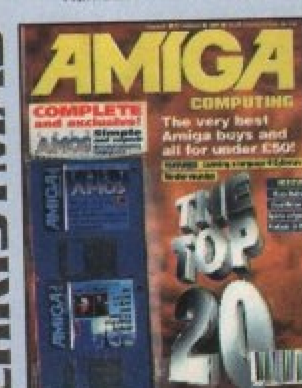
We reveal all you need to know about Amiga maintenance. Plus reviews of Warp Engine, Image F/X 2 and 3D CD's.
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DECEMBER



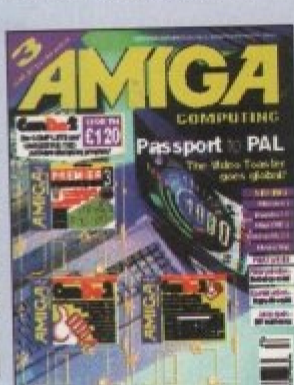
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CHRISTMAS



Want a list of the top 20 best Amiga buys? Look no further than our countdown of the cream of products for your machine. Plus a monitor roundup, Final Writer 3, VLab Motion and more reviewed.
ON 2 DISKS: The complete, exclusive Easy Amos – all yours free with *AC*.

JANUARY



The Video toaster finally arrives on the shores of Britain with the help of the Passport 4000. Also take a look at Imagine 3.1, Wordworth 3.1 and see hidden 3D pictures with StereoCAD.
ON 2 DISKS: The full version of Can Do 2 and a demo of the acclaimed football tactics game, Premier Manager 3 from Gremlin.

FEBRUARY



We go behind the scenes of Aardman Animations, those talented folk responsible for The Wrong Trousers and a rather large quantity of TV commercials – most of which have been given a helping hand by the Amiga. Plus reviews of Termite, Photogenics and Gamesmith.
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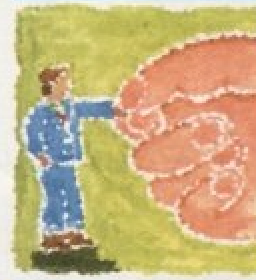
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Twist in the tail

ARexx



Paul Overaa continues his tour of compound variables with a look at some effective uses

Last month I promised to show you a novel use of ARexx's compound variables, and the starting point for these discussions is the 'tail' part of the variable, i.e. the part which comes after the first period of the compound variable's name. The important point here is that ARexx tail name specifications can be formed using the contents of other variables.

Though this may not sound particularly significant, it leads to these variables having very interesting characteristics. In fact, when this technique is used with non-numeric tails it becomes possible to build programs that appear to use 'associative', or content addressable memory access.

In other words, programs can store and retrieve things based solely on the characteristics of the object being stored, rather than having to know exactly where that data has been placed.

Listing 1 shows an example script, admittedly tongue-in-cheek, where the program user specifies a job description and the program tries to say something about the job in question.

Although there are only a few job entries in this example, notice that, because of the way the stem has been initialised, the program does at least always say something relatively sensible – even if it is that it doesn't know anything about the job you have specified.

In the first example, hard coded tail values – author, editor, accountant and so on – were being used. Supposing, however, that we eliminate these pre-initialised tails and instead let the program user build their own database of job descriptions using an arrangement based on this sort of pseudo-code:

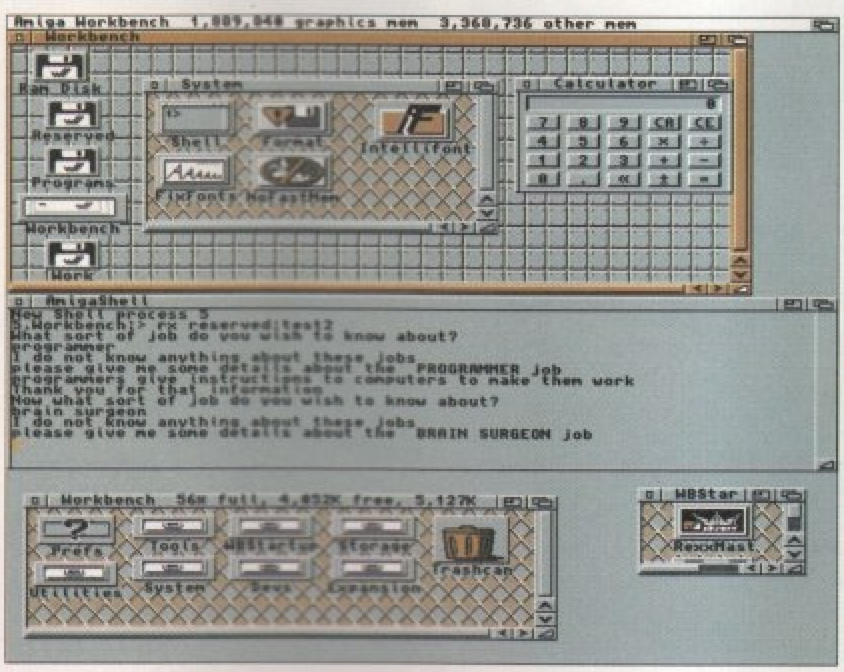
```
Initialise the compound variable stem
Collect the first item
While user has entered a non-null string
        display the job description (or
default stem)
        if the job name is not recognised
then
        do
                ask for some details
about the job
                store those details
using the job name as the tail definition
                Thank the user for that
information that they provided
        end
        Ask the user if they wish to know
about any other jobs
end
```

What happens? Well, the program gets enthusiastic and wants to learn about the jobs it encounters as it goes along. In fact, if you run the example shown in listing 2 you'll find you can teach the program simple things about particular jobs, with a typical dialogue perhaps going something like this:

```
program:  What sort of job do you wish to
know about?
user:     Doctor
program:  I do not know anything about these
jobs
program:  please give me some details about
the DOCTOR job
user:                 doctors help sick peo-
ple to get well
program:  Thank you for that information
program:  Now what sort of job would you like
to know about?
user:                 Doctor
program:  Doctors help sick people to get
well
program:  Now what sort of job would you like
to know about?
user:                 Architect
program:  I do not know anything about these
jobs
program:  please give me some details about
the ARCHITECT job etc., etc...
```

This sort of behaviour provides a good illustration of how ARexx differs from what you might call 'conventional' computer languages. Of course, there is nothing to stop you using these sort of arrangements in conjunction with ARexx's conventional file handling facilities to produce a database system that is effectively based on content addressable memory.

The implications of that, which you will doubtless appreciate if you experiment with the examples, are, needless to say, enormous!



Despite their simplicity these example scripts provide a good indication of ARexx's potential use in an unorthodox area!

```
jobs$.          ='I do not know anything about these jobs'
jobs$.author    ='authors write books and things'
jobs$.editor    ='editors make sure that magazine writers get up early and work hard'
jobs$.accountant= 'accountants help organise all the money that writers make'
jobs$.lawyer    = 'lawyers help you when you get sued'

options prompt  'What sort of job do you wish to know about ? '
say 'Give me a job title and I will try and tell you something about it...'
pull item$  /* get first item *
do while item$~==''
    say jobs$.item$; pull item$ /* get next item */
end
```

Listing I

```
jobs$.='I do not know anything about these jobs'
say 'What sort of job do you wish to know about? '

pull item$
do while item$~==''
          say jobs$.item$
          if jobs$.=jobs$.item$ then
          do
                    say 'please give me some details about the ' item$ 'job'
                    parse pull details$
                    jobs$.item$=details$
          say 'Thank you for that information'
          end
          say 'Now what sort of job do you wish to know about? '
          pull item$
end
```

Listing II: In this example the user builds up the tail set dynamically.

My favourite things

People are always asking me what my favourite sites are on the Internet. Not a day goes by without someone writing me an e-mail message like this: "Love the column, keep up the good work... blah blah", by way of a bit of ego massage, and sure enough while I'm still smiling they hit me with: "and by the way, do you know any good sites on the Internet?"

Oof! A sucker punch. Well, as it happens I do have a number of favourite sites on the Internet, so to avoid anyone having to butter me up and ask me the same bonehead question again, here is my guide to my favourite URLs, Net wide.

The entries in this guide are in URL format for your favourite Net browser, Mosaic. If you don't run mosaic or are accessing the Net through a third-party computer, like CIX or Direct Connection, then simply lose the "http://" or "ftp://" bits and just use the address on your friendly neighbourhood online web, ftp or gopher browser.



No it's not Julie Andrews, but Phil South warbling on about some of his recommended internet sites

Amiga Home Page

http://www.cs.cmu.edu:8001/Web/People/mjw/Computer/Amiga/MainPage.html

This is pretty much what the title suggests. It is a page for Amiga types, and can send you off to some really wicked Amiga-specific web pages. If you are looking for a source of Amiga files or information, then this should be your first stop on the 'Infobahn.'

URouLette

http://kuhttp.cc.ukans.edu/cwis/organizations/kucia/uroulette/uroulette.html

URouLette is a random URL generator which, when you click on the roulette wheel on the screen, sends you off randomly to a site on the Web, and you don't know where you'll end up until you get there. This is the best way to find new places, although there are others, such as:

WebCrawler

http://www.biotech.washington.edu/webcrawler/webquery.html

This site enables you to search the World Wide Web, so you can find a page by typing in a search field and pressing return. It seems to be updated on a regular basis, and has the side benefit that when the system finds a URL for you to go to, it can automatically take you there.

Whole Internet Catalog

http://nearnet.gnn.com/gnn/wic/newrescat.toc.html

An on-line version of the famous Internet book, one of the first of the guides to the Internet. This is the online version which has links to a huge amount of other sites on the Net, and rather than simply telling you about them, once again it takes you there. Lovely graphics too.

Cool Site of the Day

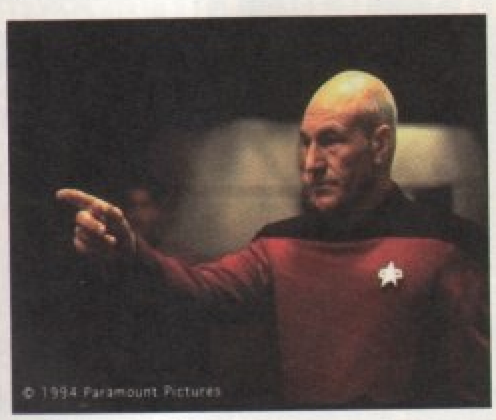
http://www.infi.net/cool.html

This is the first place I stop every day. The operator of the page puts a link to a new cool site every day, and it's always somewhere really interesting. Some of the last few days have been very far fetched, like the Female Bodybuilding Home Page. Pictures of babes with bulging biceps? I don't know, the Net gets stranger by the day.

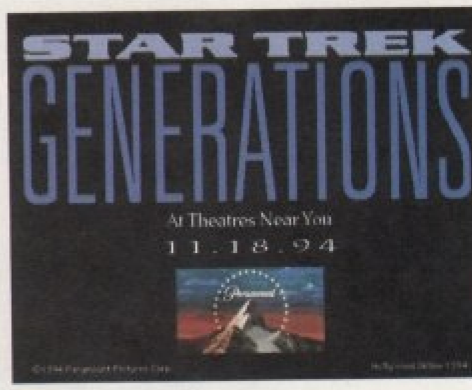
The Star Trek Generations site

http://generations.viacom.com/

The new Star Trek film has opened in the USA, but for UK citizens your only access to the film is via its own site on the Web. On it you can get information about the new film, with previews, audio, pictures, behind-the-scenes photos and news, and loads more besides, even merchandise for you to order. The site is a little graphics heavy, but there is a text-only version for people operating on limited bandwidth.



Jean-luc Picard makes it so



Taking you where no mere mortals have been before

The Netboy Home Page

http://www.interaccess.com/netboy.html

The Netboy cartoon by Stafford Huyler is the first and best daily cartoon for the Internet. You can download the new one every day, or look at the back issues. If the Net is the newspaper of the 21st Century, then these are the funny pages.

Wiretap

gopher://wiretap.spies.com

A stack of weird stuff, all neatly arranged for you to get at. There's text about various cosmic and technology issues, plus comms, fanzines, electronic books and magazines, and links to even weirder places, although that would be hard.

The Well

gopher://gopher.well.com

The Net presence of the WELL, or Whole Earth 'Lectronic Link, based in San Francisco, California. The makers of the hippy bible the Whole Earth Catalog grew up and made a publishing empire, and finally they made a Net savvy BBS and conferencing service which is a sort of US equivalent of CIX. The gopher has access to a number of files on the system, as well as information about how to get an account on the WELL.

Quartz

gopher://quartz.rutgers.edu

Another Net gopher site with weird stuff on it. More text, more zines and more odd electronic books. I love it.

Funet

ftp://ftp.funet.fi

When you are looking for Amiga programs there are three places you should try. This is the first...

Imperial College

ftp://src.doc.ic.ac.uk

... is the second...

UUnet

ftp://ftp.uu.net

...and this is the third. UUnet is the best Aminet feed to go for, as wuarchive.wustl.edu is always too busy to accept a casual caller, unless you are actually on campus. If you want to get to Aminet files, then this is your best bet.

Any more for any more?

Enough. Okay? If you find any other cool sites and you'd like to tell me about them, then please feel free. You can reach me by e-mail at:

Demon	phil@snouty.demon.co.uk
CIX	snouty
The Direct Connection	snouty
CompuServe	100102,1500
Delphi	snouty@delphi.com
eWorld	snouty

or by post to:

Phil South, Comms Section, Amiga Computing, Media House, Adlington Park, Macclesfield SK10 4NP.

Backgrounds to the fore

Amiga backgrounds have improved over the years, and with AGA and CD-ROM technology they just keep getting better. Gary Whiteley waxes lyrical....



During my years of using Amigas in video and multimedia applications, I've seen how the standard of background images for titling, 3D, special effects and presentations have changed. Many of these changes have come about because of the latest AGA Amigas which can display so many more colours than their predecessors, and because of the advent of CD-ROMs.

Of course the colour restrictions of the earlier Amigas can have a knock-on effect on the images to be used as backgrounds, especially when titles or animated graphics have to be overlaid onto them.

All too often, the only way to get a set of reasonable-looking words or animated images onto a background is to restrict the background to just eight colours, independent of those being used by the foreground text or graphics, and to use the remaining eight colours to generate the text or graphics.

As you can imagine, eight colours isn't exactly going to produce stunning results, so crude graduated backgrounds, grids and other geometric designs were often the order of the day on older Amigas, especially when Amiga videographers weren't prepared – or didn't understand how – to put in the extra effort to spice up their productions by designing with palette and memory constraints in mind.

Colour restrictions become particularly irksome when ColorFonts are the chosen font types. But surely the Amiga's HAM mode could surmount such problems? Well, yes and no, because although HAM has a 4096 colour palette it is available only in Lo-res, so while HAM has more colours available there is an overwhelming tendency for graphics and text to look rather chunky around the edges, as well as for digitised images to exhibit a degree of smeariness.

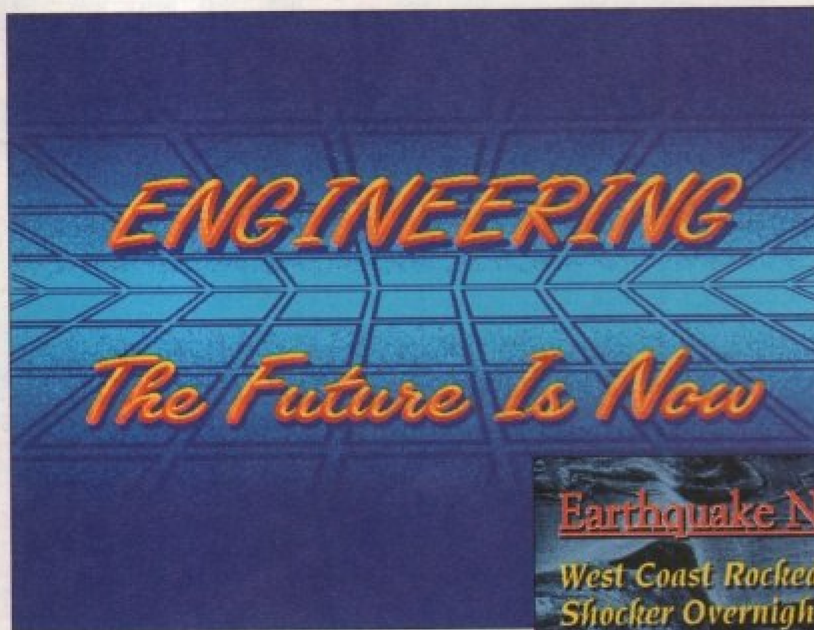
The same chunkiness problems apply to 32 colour Lo-res images and in my opinion, neither HAM nor 32 colour Lo-res images – of any kind – are particularly suited to serious video work, though sometimes available memory dictates otherwise.

These colour and resolution limitations are still in force for Amiga users who don't have access to either an AGA Amiga or an Amiga fitted with a 24-bit card or other display device, but that doesn't necessarily mean that there's no alternative to boring backgrounds and toned-down titles.

Ample examples of what can be done with a small range of colours have been provided in the various releases of Scala, and there's no doubt that with some artistic application a great deal can be done with a narrow colour palette.

Indeed, I'd like to think that in some ways Scala has been responsible for changing the way that many Amiga videographers and DTV designers produce and use backgrounds.

Suddenly there was a new clarity to background design, and I'm sure that the release of Scala helped to inject new life into the Amiga as a DTV machine because it practised what it preached – quality. As Scala became more popular so its production values rubbed off and henceforth, Amiga presentations seemed to have more class.



Early backgrounds were dull....



... then Scala arrived to gee things up

When affordable – at least to professional users – graphics cards began to appear smeary, HAM grabs or colour-starved Hi-res images were on their way out as the full panoply of 16 million colour artwork became available to the Amiga videographer.

At last it was possible to turn Amiga images into quality video images and backgrounds, even if they remained mostly static. For those without 24-bit access, programs such as Art Department and Deluxe Paint added improved dithering and palette-locking routines to squeeze more image out of less colours and, like many other dedicated Amiga users, I can confirm that, in some cases, less actually means more.

QUALITY

The biggest leap in image quality for Amiga users happened when the A1200 and A4000 Amigas were released. With their huge colour palettes and HAM8 and 256 colour modes providing near 24-bit quality output, plus expanded chip RAM and faster processors, Amigas suddenly had a new lease of life, especially since the A1200's output could be recorded direct to video.

To capitalise on this, various companies started releasing more collections of images for use as backgrounds, textures and so on, and particularly for use in DTV work.

Which brings me to the reason I started this piece in the first place – the new NexusPro CD-ROM. When VideoWorld contacted me to see if I'd be interested in reviewing it, I had to turn them down because I didn't have a CD-ROM drive!

Now I do – if only on loan – and after just a week I'm seriously thinking about buying one of my own, not just for access to the background images on the VideoWorld disc, but because they seem like seriously useful things and I wonder why – apart from having to fork out the cash – I've not got one earlier.

With over 450 high-class background images, all in GIF, 24-bit Jpeg and 256 colour versions, plus over 300 CG fonts and a bunch of sound files and PD utilities all available direct from CD, it might be some time before I ever have to make a background again.

Even better, the NexusPro CD is just one of an increasing number of quality graphics CD-ROMs that are becoming available for the Amiga at value-for-money prices.



Now we have hundreds of high-quality backgrounds on CD-ROM

Artistic talent

So there's no excuse for using a boring background ever again, even if you have the artistic talent of a brick. PC users already know that CD-ROMs are the way of the future and that's something serious Amiga DTV users should take note of, especially if they want to bring backgrounds to the fore.

MUSIC

Lost in music

Paul Overaa getting up early just to get first grabs of what was happening musicwise at the World of Amiga exhibition was a mini-event in itself. Luckily, he's now recovered enough to tell you about it...



Well, those of you who didn't make it to the Commodore 'World of Amiga' show in December will be pleased about one thing. As far as the musical side of things went, you didn't miss much! That's not to say there weren't some great new products around because there were – Almathera's Photogenics package for example.

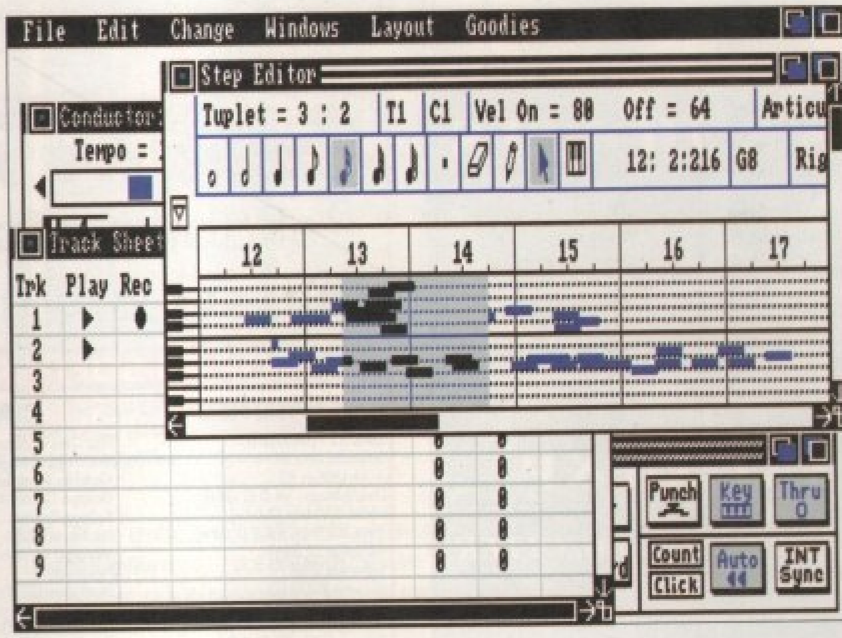
On the music scene though, the only new product creating much sales interest was HiSoft's 12-bit Aura sampler. There were no new, or even updated, Amiga sequencer packages around and not a running Amiga Midi sequencer package in sight. It must be said that at times, on the music front at least, things looked pretty sad.

There were, however, plenty of music bargains to be had. For instance, a stock of the Music-X version 1.1 packages were being sold for ten pounds each, so if you were in the market for a cheap Midi sequencer then that was ten quid well spent – especially as you can upgrade from version 1.1 to the latest Music-X2/Notator-X version for a quite reasonable upgrade fee. Similarly, there were good deals on 8-bit samplers, sample editors, tracker programs and so on.

Being both a musician and a keen fan of the Amiga, you can imagine that I left the show feeling a little less than elated. What I didn't realise, however, was that the best part of the day was yet to come.

I passed this guy sitting just outside the Wembley conference centre playing his guitar and was about to throw him a few bob when I noticed he had a World of Amiga bag with him. It turned out he was just waiting for his girlfriend, so I put my money away and instead asked him what he had thought of the exhibition, and from there we got talking about Amigas and music.

Needless to say he had an Amiga but happily admitted to using an Atari ST for all his sequencing work. During our conversation he made the point that while Dr T's KCS is good, and sophistication-wise used to be on par with the Atari ST version of KCS, nowadays the Atari-based Dr T sequencing software has far more development work put into it so he wouldn't dream of parting with his ST. That, I suppose, is a fair enough comment.



Passport Design's Master Tracks Pro sequencer is another package that failed to succeed on the Amiga despite doing incredibly well on other machines.

Another point he raised was that the Amiga really could have done with something like the Steinberg Pro 24 in the early days. This, you may remember, was the defacto standard sequencer on the ST for a number of years before its successor, Steinberg's Cubase sequencer, came along.

The fact is, however, that the Amiga did get Steinberg's Pro 24 sequencer – about four or five years ago – but it surfaced and disappeared from the glare of publicity so quickly that few people ever got the chance to see it.

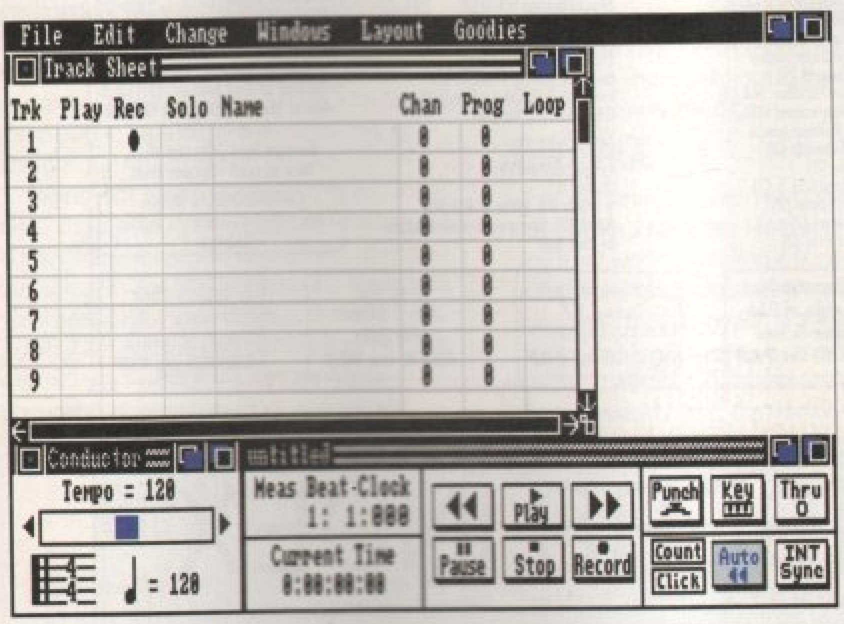
Many assumed at the time that, like Passport Design's Master Tracks Pro sequencer which was also ported to the Amiga, the Pro 24 Amiga package had been withdrawn.

Nevertheless, the mention of Steinberg Pro 24 got me thinking and when I got back home I telephoned the 'powers that be' just to find out whether they realised that the Amiga was still in existence – in retrospect this might not have been ideal timing on my part given Commodore's current problems.

You could have knocked me down with a pint of Beamish, because apparently Pro 24 for the Amiga is still alive and kicking. Actually, the reply I got was: "The Pro 24 Amiga package is still available – but to be honest I'm afraid we don't sell that many."

Now, I'm as good at missing things as the next person but, credit where credit is due, I am usually on-the-ball as far as Amiga Midi sequencing is concerned. If I thought Pro 24 Amiga was as good as dead, you can bet your life a lot of other people do too!

Being curious I mentioned that I hadn't seen any press releases or adds for Pro 24 Amiga for a long, long time. "No, you wouldn't because we don't really advertise it as such" came back the reply. "That", I said, "might just be why you don't sell many" – I was now beginning to think that perhaps I could have gone into advertising after all.



It might be time for Passport Designs to have second thoughts about supporting the Amiga – their sequencer package could make it second time around!

Full of ideas

Knowing full well that the Amiga could certainly do with more music software, I also suggested that Steinberg let a few magazine reviewers take a look at the current package in order to tell people what it is like. "Well, to be honest that does sound like a good idea", said the voice on the other end of the phone, "we'll get someone to phone you to arrange things".

The upshot of all this is that there's a good chance you'll be seeing a review of the current Pro 24 Amiga package next month. On the other hand, perhaps you won't!

AMIGA COMPUTING ADVERTISERS INDEX

DTP in the real world



For his final word about the Amiga world of publishing, Ben Pointer takes a look at the forthcoming software revolution

Professional desktop publishers have difficulty in taking the Amiga seriously. Well, it's not the computer so much as the fact that there has never been any truly professional quality desktop publishing software for the Amiga.

Sure, with enough effort and the will to win, professionals can use what Amiga software there is to produce professional results, but it has always been more difficult than it needs to be, and there have always been high-end things that the available software simply could not do.

Two recent software releases could change all that. Neither is yet perfect – in fact both are a long way from perfect – but the developers of both programs are working hard to bring them up to spec. Indeed, both companies have plans that, if they are realized, could mean the Amiga has the best desktop publishing software on any platform.

If you've not already guessed, I'm talking about Soft-Logik's PageStream 3 and Almathera's Photogenics. You will have read the poor reviews of PageStream 3 and you may already own it and be tearing your hair out over the bugs and missing or unfinished features.

But let's assume that Soft-Logik does finish it, fixes all the bugs and makes it faster – they do have a good track record on this score. In which case, all that they claimed in the run-up to its release – essentially that it will be better than Quark Xpress and Pagemaker – will be pretty close to the mark.

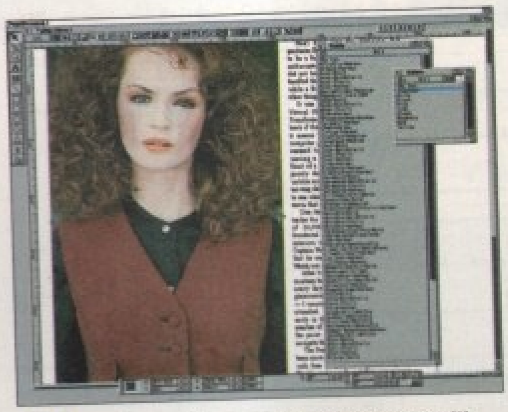
The funny thing is that 90 per cent of the high-end features Soft-Logik is building into PageStream 3 are going to be used by perhaps only five per cent of its users. Most PageStream users are not professional desktop publishers.

Quite a few might be semi-professional (ish), but there are very few desktop publishing businesses whose work revolves around PageStream, nor around any other Amiga desktop publishing software come to that. Why do I raise this point? Because professional features always require greater resources. Huh? Resources? OK, memory and storage space to you and me, and that means that even Amiga owners who consider themselves to have pretty big systems may be brought down to earth with a bump.

PageStream 3 requires 3Mb of RAM and a hard drive. That's what it says on the box. Peanuts, eh? But to be able to use it to do anything other than simple leaflets and few-page text-only documents you'll need 8Mb, 10Mb, 16Mb.... or more.

Why? Because the kind of 256-colour or 24-bit graphics you'll want to incorporate in your documents all take up memory, and because many of the terrific new features in PageStream 3 eat memory like crazy – not because they are badly written, simply because the kinds of things it is doing require memory. Like having several different views of the same document open at the same time – a really useful feature for working on things in high magnification while at the same time retaining the overall view of a page.

But it uses memory. Like having several different documents open. Like hotlinking between PageStream itself and the text and graphics editors. Without enough memory, many of PageStream's advanced features will either not be available to you or will result in the hated 'not enough memory' message.



In six months or so, PageStream 3 will be the best DTP software the world has ever seen, never mind what has been written by short-sighted reviewers



Photogenics is in its infancy, but already it has enough features to make it useful to the professional Amiga desktop publisher

STORAGE

It's the same story with hard drive space. PageStream 3 has eaten 14Mb of my hard drive, and that's without installing any extra fonts, and without taking storage space for graphics into consideration. Photogenics, too, may require more resources than you realise. It can only perform its deeply wonderful tricks by invisibly storing picture data in several buffers. The memory eaten by the picture you are looking at on the screen is just the start of the story. And that data is all stored in 24-bit colour fidelity.

A single screen sized picture, which is tiny in desktop publishing terms, may need 4-6Mb of memory and 1Mb or more disk space. Even the first release of Photogenics, aimed at the 'low-end' A1200 user, requires just about every bit of memory and storage space available to the average upgraded user. Imagine what the promised Professional version will require.

I'm not criticising these programs. No, no, no. I'm attempting to illustrate why Amiga desktop publishing software has always been behind the pace. Produce software which requires more memory and a bigger hard drive than the average user owns, and you are producing software which very few people will buy. Hello bankruptcy.

These are the blunt facts. Frankly, I am fed up with reading articles in Amiga magazines complaining that a program requires a lot of memory or a very large hard disk. You read it and then you too walk around moaning that such-and-such a program is rubbish because it needs more memory than you can afford.

Then at the same time you (and they) moan that there isn't the software for the Amiga to do what you need to do. Tell you what everyone needs. Everyone needs to get real. Look inside a professional desktop publisher's workstation and the chances are you'll find 64Mb of memory.

Why? Because virtual memory is not the answer. It is slow. It is always liable to crash the machine. In the long term it costs professional desktop publishers more money than buying 64Mb of real memory.

You cannot have the power without paying the price, and the price is memory and storage space. Storage space is getting cheaper – Gigabyte drives for under £400, 270Mb SyQuest cartridges for about £60. The odds are, the price of storage space will continue to fall. But memory prices have bottomed out. As expensive as memory is right now, it is unlikely to get cheaper – it will probably get more expensive.

It doesn't matter whether you have an Amiga, a Mac or a PC; without enough memory and hard disk space you cannot be a professional desktop publisher. And it has nothing to do with running big programs, the memory and storage space is required to store and work with the massive amounts of data required in the professional world.

The big risk

So you see we can't have it both ways. We can't have top quality DTP software that will run on under-specified machines. Soft-Logik and Almathera are two companies who have decided to risk launching software that, to use productively, requires more resources than the average Amiga owner has.

They have gambled heavily. And the world is watching to see whether you will go out and buy more RAM and bigger hard drives just so you can get the best from these programs. The future, as always, is in your hands.

A fond farewell

This was Ben Pointer's last time of writing for us, so a big thank you to him for all the time and effort put into making this column so successful.

As long as your ad is ten words or less, it's absolutely free! Should you want more space, you'll find unrivalled value for money – for instance, 25 words cost just £10. Fill in the form below and send it to us with your payments (if applicable) – and remember to include your telephone number!

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◆ Zool, Epic, Thunderhawk and more. Any offers? Tel: 0947 604840.
◆ Imagine 3.0, £75. Wordworth 3.0a, £50. Tel: 0450 375081.
◆Amiga contacts wanted worldwide. 100 per cent reply. Tel: Portugal 033-21533.
◆ Nocturne BBS. Midnight to 7am up to 14-4. Tel: 0507 527867.
◆ Two 1Mb 30 pin SIMMS, £25 each inc. P&P. Tel: 0983 294295.
◆ Contacts wanted: Mark Walmsley, 7 Mosley Park, L'oerry. Northern Ireland BT47 1HR.
◆ A1200 4Mb, 120Mb HD, AKF30 monitor, 240c printer, two external floppies, games, manuals etc, £850 ono. E-mail Moscacr @ aston.ac.uk.
◆ Wanted: 4meg SIMM for A4000. 1meg SIMM for sale. Tel: 0263 722169.
◆ Amiga A1200 contacts sought. P. Devilin, 44 Norglen crescent, Belfast, C0-Antrim, N. Ireland.
◆ A500 hard drive. Swap? Tel: 081-814 0105, before 6pm.
◆ Amiga A500, 2Mb, Stereo Master, AMOS Professional, £160 ono. Tel: 0256 862616.
◆ DPaint 4 or 4 AGA plus two videos, $35. Tel: 0694 723827.
◆ Phillips CM8833 MK2 monitor, £150 ono. As new, Tel: 0256 462247.
◆ For a reliable AGA contact: T. Engwallsvag, 14 Uttran, Sweden.
◆ Contacts wanted: Mike 28 St Michael's Road, Ashford, Middx TW15 2DP.
◆ Contacts wanted for new magazine. Write: Alistair, 18 Braehead, Bo'ness.
◆ 2Mb PC1208 20Hz FPU, £110. Sportster modem, £120. Tel: 0302 371679.
◆ Contacts wanted for a magazine. Write: Alistair, 18 Braehead, W Lothian.
◆ Contacts wanted, 100 pe cent reply. Contact: 42 Barskimming Road, Mauchline, Ayrshire, Scotland.
◆ Amiga computing magazines with disks, 1990-'93. Tel: 0234 213685.
◆ Video backup Z30. Tel: Andy: 061-790 00962.
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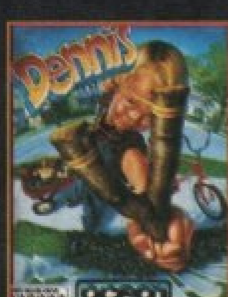
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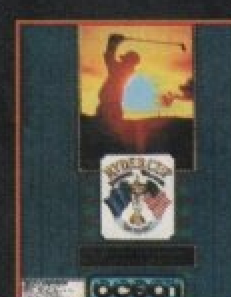


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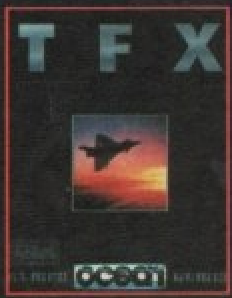
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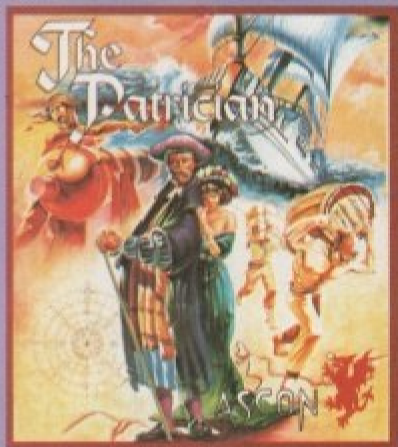
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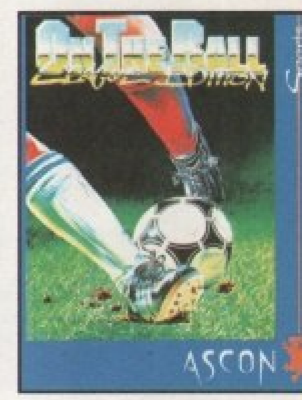


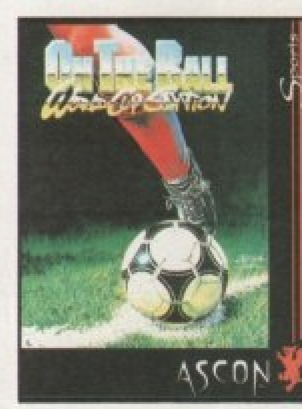
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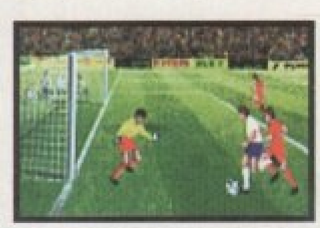


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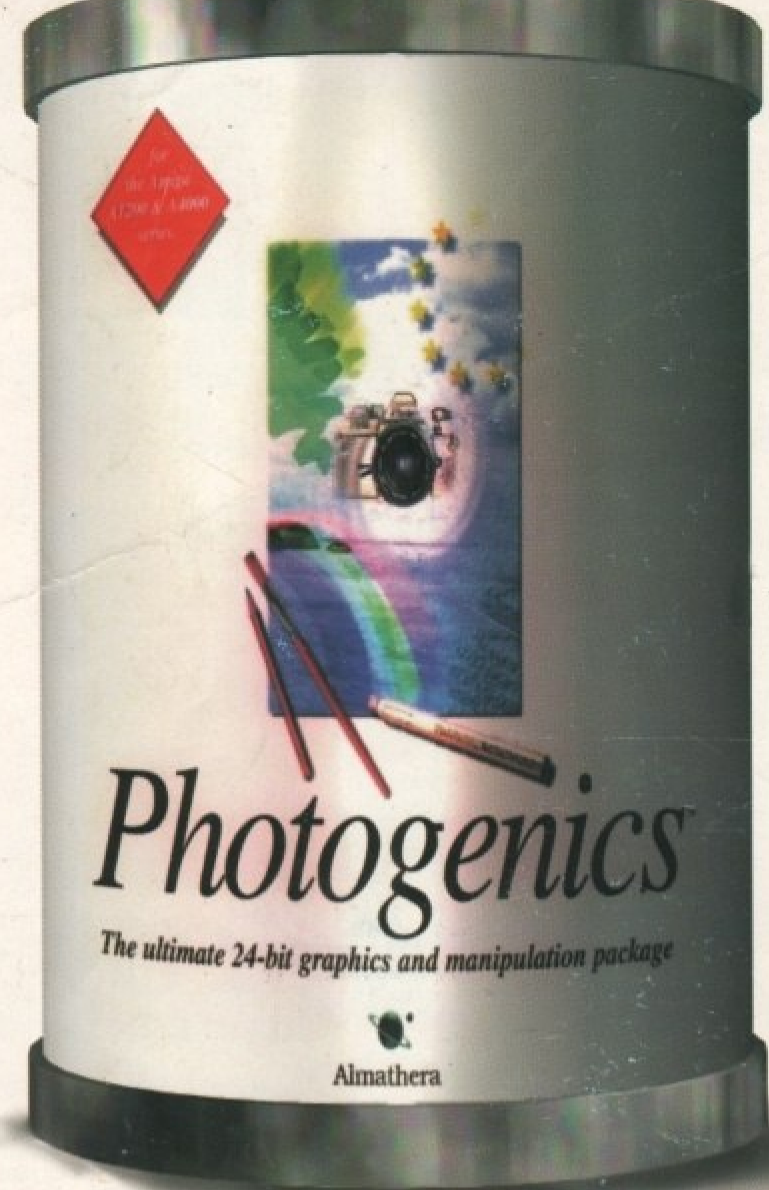
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